Board Finance & Audit Committee Meeting and Special SMUD Board of Directors Meeting

Date: Tuesday, May 17, 2022
Time: Scheduled to begin at 5:30 p.m.
Location: Virtual Meeting (online)
AGENDA
BOARD FINANCE & AUDIT COMMITTEE MEETING
AND SPECIAL SMUD BOARD OF DIRECTORS MEETING

Tuesday, May 17, 2022
Scheduled to begin at 5:30 p.m.

Zoom Webinar Link: Join Board Finance & Audit Committee Meeting Here
Webinar/Meeting ID: 160 550 8826
Passcode: 185448
Phone Dial-in Number: 1-669-254-5252 or 1-833-568-8864 (Toll Free)

Pursuant to Government Code section 54953(e) and the Emergency Board Meeting Procedures adopted by the SMUD Board of Directors, the regular Board meeting and other public meetings are currently conducted solely via virtual (online/teleconference) meeting to align with state, local, and federal guidelines for the containment of the coronavirus.

Live video streams and indexed archives of meetings are available at:
http://smud.granicus.com/ViewPublisher.php?view_id=16

Members of the public may register to provide verbal comments at an upcoming Board or Committee meeting by emailing a request to speak to PublicComment@smud.org. Please include the date of the meeting, name, and topic or agenda item the requestor wishes to speak on. The request may also be submitted while the meeting is in progress during the standard time for the agenda item or topic. **Pre-registration is strongly encouraged by no later than 3:00 p.m. on the day of the meeting.**

Members of the public may provide written public comments on a specific agenda item or on items not on the agenda (general public comment) by submitting comments via e-mail. Comments may be submitted to PublicComment@smud.org and will be placed into the record of the meeting.

Members of the public that are listening to or watching the live stream of a Committee meeting and wish to submit written comments on a specific agenda item as it is being heard may submit their comments, limited to 250 words or less, to PublicComment@smud.org, noting the agenda item number in the subject line. The Committee Chair may read comments for items on the agenda into the record, in her discretion, based upon such factors as the length of the agenda or the number of e-mail comments received. General public comment for items not on the agenda will not be read into the record but will be provided to the Board and placed into the record of the Board meeting if it is received within two hours after the meeting ends.

This Committee meeting is noticed as a joint meeting with the Board of Directors for the purpose of compliance with the Brown Act. In order to preserve the function of the Committee as advisory to the Board, members of the Board may attend and participate in the discussions, but no Board action will be taken. The Finance & Audit Committee will review, discuss and provide the Committee's recommendation on the following:
DISCUSSION ITEMS

1. Laura Lewis
   Make findings pursuant to Government Code section 54953(e) to continue holding meetings virtually during proclaimed state of emergency (recurring item, every 30 days).
   Presentation: 2 minutes
   Discussion: 1 minutes

2. Laura Lewis
   Discuss resolution calling election for Directors for Wards 3, 4, 6, and 7 and request Sacramento County to consolidate that election with the November 8, 2022, general election.
   Presentation: 2 minutes
   Discussion: 1 minutes

3. Russell Mills
   Approve the issuance of SMUD 2022 Series J Revenue Refunding Bonds and/or SMUD 2022 Series C Subordinated Electric Revenue Refunding Bonds, authorize the distribution of the Preliminary Official Statement, and authorize the Chief Executive Officer and General Manager, or his designee, to execute documents necessary to complete the refunding transaction or transactions, including the Bond Purchase Agreement or Agreements.
   Presentation: 5 minutes
   Discussion: 3 minutes

4. Kathy Ketchum
   Designate SMUD’s Chief Financial Officer, Controller, Assistant Controller(s), and Principal Financial Accountant as “Authorized Agents” to engage with Federal Emergency Management Agency and the California Governor’s Office of Emergency Services for the purpose of obtaining federal financial assistance grants for the next three years.
   Presentation: 3 minutes
   Discussion: 2 minutes

INFORMATIONAL ITEMS

5. Casey Fallon
   Quarterly Procurement Report for First Quarter 2022.
   Presentation: 10 minutes
   Discussion: 4 minutes
6. Lisa Limcaco  
Provide the Board with the financial results from the three-month period ended March 31, 2022.  
Presentation: 3 minutes  
Discussion: 2 minutes

7. Lisa Limcaco  
Provide the Board with the summary of SMUD’s current Power Supply Costs.  
Presentation: 2 minutes  
Discussion: 2 minutes

8. Public Comment

9. Rosanna Herber  
Summary of Committee Direction.  
Discussion: 1 minute

Pursuant to Resolution No. 20-06-08 adopted on June 18, 2020, Emergency Board Meeting Procedures are in effect:

Members of the public may make either a general public comment or comment on a specific agenda item by submitting comments via email. Comments may be submitted to PublicComment@smud.org. Comments will be provided to the Board and placed into the record of the Committee meeting if it is received within two hours after the meeting ends.

Members of the public that are listening or watching the live stream of a Board meeting and wish to comment on a specific agenda item as it is being heard, may submit their comments, limited to 250 words or less, to PublicComment@smud.org. The Board Committee Chair may read the comments into the record, in her discretion, based upon such factors as the length of the agenda or the number of email comments received. Comments will be provided to the Board and placed into the record of the Committee meeting if it is received within two hours after the meeting ends.

Members of the public may register to provide verbal comments at an upcoming Board or Committee meeting by emailing a request to speak to PublicComment@smud.org. Please include the date of the meeting, name, and topic or agenda item the requestor wishes to speak on. The request may also be submitted while the meeting is in progress during the standard time for the agenda item or topic. Pre-registration is strongly encouraged by no later than 3:00 p.m. on the day of the meeting.

ADA Accessibility Procedures: Upon request, SMUD will generally provide appropriate aids and services leading to effective communication for qualified persons with disabilities so that they can participate equally in this virtual meeting. If you need a reasonable auxiliary aid or service for effective communication to participate, please email Toni.Stelling@smud.org, or contact by phone at (916) 732-7143, no later than 48 hours before this virtual meeting.
TO

1. Jennifer Davidson
2. Lora Anguay
3. Scott Martin
4. 
5. 
6. 
7. 
8. 
9. Legal
10. CEO & General Manager

<table>
<thead>
<tr>
<th>Consent Calendar</th>
<th>X</th>
<th>Yes</th>
<th>No</th>
<th>Budgeted</th>
<th>X</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>FROM (IPR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe Schofield</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAIL STOP</td>
<td>B406</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT.</td>
<td>5446</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE SENT</td>
<td>05/10/22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NARRATIVE:

**Requested Action:** Make findings pursuant to Government Code section 54953(e) to continue meetings via virtual (online/teleconference) meeting for the next 30 days.

**Summary:**

Pursuant to Executive Order N-29-20 issued on March 17, 2020, and Executive Order N-35-20 issued on March 21, 2020, as well as the Emergency Board Meeting Procedures adopted by this Board via Resolution No. 20-06-08 on June 18, 2020, this Board has conducted regular Board meetings and other public meetings via remote (online/teleconference) meetings.

On September 16, 2021, Governor Newsom signed Assembly Bill 361 (AB 361), which became effective immediately upon signature, containing language that eased Brown Act requirements to allow local agencies to meet remotely. AB 361 allows meetings to continue to be conducted by teleconference, similar to the process used during the current COVID-19 pandemic, but only when there is a declared state of emergency when the local governing body makes findings that there are imminent health risks to meeting in person.

On April 21, 2022, CAL/OSHA re-adopted its workplace COVID-19 Emergency Temporary Standards (ETS), as modified, effective May 6, 2022, through December 31, 2022, including outbreak reporting; SMUD staff continue to report COVID-19 infections, though at a decreasing rate; the lack of a requirement to sign in at SMUD Board meetings with contact information could make contact tracing nearly impossible; and the most recently reported COVID-19 data published by the Sacramento County Department of Public Health on its Epidemiology COVID-19 Dashboard continues to show elevated case and death data and indicated a local COVID-19 case rate of 10.3% (as of April 30) and 8 deaths since the last update. The case rate nearly more than quadrupled between the end of March and early May, and continues to increase. It was reported on May 11, 2022, that Sacramento County has returned to high community transmission rates for COVID-19 as defined by the Centers for Disease Control and Prevention.

Moreover, when SMUD Board and Committee meetings were held in person, they could last as long as four hours with all participants in a single room. And although we could space out participants, they would still be breathing one another’s respirated air for what could be a lengthy period of time.

By Resolution 21-10-01 adopted on October 12, 2021, Resolution No. 21-10-03 adopted on October 21, 2021, Resolution No. 21-11-05 adopted on November 18, 2021, Resolution No. 21-12-04 adopted on December 9, 2021, Resolution No. 22-03-01 adopted on March 8, 2022, Resolution No. 22-03-03 adopted on March 17, 2022, Resolution No. 22-04-01 adopted on April 13, 2022, and Resolution No. 22-04-03 adopted on April 21, 2022, this Board has previously made findings to continue to hold regular Board meetings and other public meetings via solely virtual (online/teleconference) format.

Staff’s recommendation is to continue to hold regular Board meetings and other public meetings via solely virtual (online/teleconference) meeting and continue to monitor developments related to the COVID-19
pandemic. Pursuant to Government Code section 54953(e), this Board must make findings every 30 days that conditions warrant continuing to meet virtually instead of in-person.

**Board Policy:** Governance Process GP-3, Board Job Description – j) Take such other actions as may be required by law.

**Benefits:** Making the determination to continue remote meetings will allow for efficient conduct of SMUD business.

**Cost/Budgeted:** Contained in Business Unit budget for internal labor.

**Alternatives:** Take no action and comply with all original Brown Act requirements.

**Affected Parties:** SMUD, Board of Directors, Public

**Coordination:** Executive Office, Board Office, Legal Department, Information Technology, Communications

**Presenter:** Laura Lewis, Chief Legal & Government Affairs Officer

### Additional Links:

**SUBJECT**

| Make Findings to Continue Online/Teleconference Meetings |

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
TO

1. Jennifer Davidson
2. Lora Anguay
3. Scott Martin
4. 
5. 
6. 
7. 
8. 
9. Legal
10. CEO & General Manager

Consent Calendar | X | Yes | No If no, schedule a dry run presentation. | Budgeted | X | Yes | No (If no, explain in Cost/Budgeted section.)
--- | --- | --- | --- | --- | --- | --- | --- | ---
FROM (IPR) | Laura Lewis | DEPARTMENT | Executive Officer | MAIL STOP | B308 | EXT. | 6123 | DATE SENT | 04/29/22

NARRATIVE:

Requested Action: Adopt resolution calling election for Directors for Wards 3, 4, 6, and 7 and request Sacramento County to consolidate that election with the November 8, 2022, general election.

Summary: The members of SMUD’s Board of Directors are elected to staggered four-year terms from the Wards they represent. The terms of the Directors for Ward 3 (Gregg Fishman), Ward 4 (Rosanna Herber), Ward 6 (Dave Tamayo) and Ward 7 (Heidi Sanborn) will expire on December 31, 2022. Section 11829 of the Municipal Utility District (MUD) Act, in the Public Utilities Code, provides that the resolution calling the election shall also provide for the consolidation of the election with the general election to be held at the same time, in the county in which SMUD is located and to authorize the county to canvass the returns and certify the results of the election to the Board. In addition, the resolution shall state the date and purpose of the election, request the county to reestablish the boundaries of election precincts to coincide with the ward boundaries, specify the length of a candidate statement of qualifications, manner of payment by the candidate, determine the method for breaking a tie vote, and designate the boundaries of the subject SMUD Wards. As part of the resolution, staff is recommending that the Board adopt the following:

a) In the event of a tie vote, determine the election by lot; and
b) Require candidates to pay at the at the Sacramento County Voter Registration and Elections for costs associated with the statement of qualifications; and
c) Set the statement of qualifications at 200 words or less.

The Sacramento County Registrar of Voters’ Office has informed SMUD that the resolution calling and consolidating the election must be received by their offices no later than July 6, 2022. The attached resolution sets forth all of the information necessary to call the election for Wards 3, 4, 6, and 7 and consolidates the election with the general election to be held on November 8, 2022.

Board Policy: Board Job Description GP-3(j) – Take such other actions as may be required by law.

Benefits: Provides for election of Directors in compliance with law.

Cost/Budgeted: Sacramento County will bill SMUD for the actual cost of conducting the election when completed. $375,000 was budgeted based on the cost of previous elections.

Alternatives: None. This action is legally required.

Affected Parties: Board Members, Board Office, Office of the General Counsel

Coordination: Office of the General Counsel, Board Office, County Elections

Presenter: Laura Lewis, Chief Legal & Government Affairs Officer

Additional Links:

SUBJECT: Calling Election of Directors for Wards 3, 4, 6, and 7
BE IT RESOLVED BY THE BOARD OF DIRECTORS
OF SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. That an election is called to be held on the 8th day of
November, 2022, for the purpose of electing four (4) directors of the Sacramento
Municipal Utility District (“SMUD”), one of whom shall be a resident and voter of each of
Wards 3, 4, 6 and 7. The boundaries of said wards are hereby fixed and established as
shown on the sheets appended hereto. Each director shall be elected for a full four-
year term from the ward in which he or she resides and the election shall be held and
conducted in all respects as required by law.

<table>
<thead>
<tr>
<th>Ward</th>
<th>Incumbent</th>
<th>Expiration of Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Gregg Fishman</td>
<td>2022</td>
</tr>
<tr>
<td>4</td>
<td>Rosanna Herber</td>
<td>2022</td>
</tr>
<tr>
<td>6</td>
<td>Dave Tamayo</td>
<td>2022</td>
</tr>
<tr>
<td>7</td>
<td>Heidi Sanborn</td>
<td>2022</td>
</tr>
</tbody>
</table>

Section 2. That the Board of Supervisors of the County of Sacramento
is requested to consolidate said election of directors of SMUD with the general election
to be held on the 8th day of November, 2022.

Section 3. That the Board of Supervisors of the County of Sacramento
is requested to reestablish the boundaries of such election precincts as are divided by
the boundaries of Wards 3, 4, 6, and 7 of SMUD to provide that the boundaries of the
election precincts coincide with the boundaries of said wards.

Section 4. That the Board of Supervisors of the County of Sacramento
is authorized to canvass the returns of the election of directors and to certify the election
results to this Board.
Section 5. That in the event of a tie vote between candidates, the election shall be determined by lot.

Section 6. That any candidate for the Board of Directors of SMUD who files a statement of qualifications for printing and distributing pursuant to Section 13307 of the Elections Code shall pay at the Sacramento County Voter Registration and Elections office, in advance, for the publication of the candidate’s statement, pursuant to Elections Code Section 13307, in the amount estimated by the Sacramento County Registrar of Voters, and that any such statement shall contain 200 words or less.

Section 7. That SMUD agrees to reimburse the Registrar of Voters for actual costs incurred, such costs to be calculated by the method set forth in the County’s current Election Costs Allocation Procedures, pursuant to Elections Code section 10520.

Section 8. That the Secretary of SMUD is directed to transmit certified copies of this resolution to the Clerk of the Board of Supervisors of the County of Sacramento, to the County Clerk of the County of Sacramento, and to the Registrar of Voters of the County of Sacramento.
Ward 1

Beginning at a point of intersection of the Easterly Boundary Line of Sacramento County and the centerline of Green Valley Road; thence Southwesterly along Green Valley Road to the centerline of Cummings Way; thence Westerly and Southerly along the centerline of Cummings Way to the centerline of East Natoma Street; thence Westerly along the centerline of East Natoma Street to the centerline of the two hundred (200’) foot wide easement to Sacramento Municipal Utility District as described in the Final Order of Condemnation recorded in the office of the Sacramento County Recorder in Book 3277, at Page 346 of Official Records; thence Southeasterly along the centerline of said easement to the centerline of the two hundred (200’) foot wide easement to Sacramento Municipal Utility District as described in the Final Order of Condemnation recorded in the office of the Sacramento County Recorder in Book 3277, at Page 346 of Official Records; thence Southeasterly along the centerline of last said easement to the centerline of Oak Avenue Parkway; thence Southeasterly along the centerline of Oak Avenue Parkway to the centerline of Blue Ravine Road; thence Southwesterly along the centerline of Blue Ravine Road to the Northeasterly prolongation of the Southerly Parcel line of Parcel 7 as described in the Quitclaim Deed recorded in the office of the Sacramento County Recorder in Book 19960906 at Page 1665; thence Southwesterly along the Northeasterly prolongation of said parcel and along the Southerly Parcel Line of said Parcel to the centerline of Sibley Street; thence Southerly along the centerline of Sibley Street to merge with the centerline of Prairie City Road; thence Southerly and Southwesterly along the centerline of Prairie City Road to the City of Folsom Boundary Line; thence Westerly and Southwesterly along the City of Folsom Boundary Line to the centerline of Aerojet Road; thence Northwestesterly along the centerline of Aerojet Road to the centerline of US Highway 50 (the El Dorado Freeway); thence Southwesterly along the centerline of US Highway 50 (the El Dorado Freeway) to the centerline of Hazel Avenue; thence Northwestesterly along the centerline of Hazel Avenue to the centerline of the American River; thence Southwesterly, along the centerline of the American River to the southerly prolongation of the centerline of San Juan Avenue; thence Northerly, along the southerly prolongation of the centerline of San Juan Avenue and the centerline of San Juan Avenue to the centerline of Winding Way; thence Westerly, along the centerline of Winding Way to the centerline of Garfield Avenue; thence Northerly, along the centerline of Garfield Avenue to the centerline of Greenback Lane; thence Northwestesterly, along the centerline of Greenback Lane to the centerline of Interstate Highway 80; thence Northeasterly along the centerline of Interstate Highway 80 to the City of Citrus Heights Boundary Line; thence Northerly along the City of Citrus Heights Boundary Line to the Southerly prolongation of the Eastern boundary line of
the Plat of "Larchmont Foothills Unit No. 9" as recorded in the office of the Sacramento County Recorder in Book 110 at Page 21; thence Northerly along the Southerly prolongation of said Plat and along the Eastern boundary line of said plat to the Eastern boundary of the Plat of "Larchmont Foothills Unit No. 8" as recorded in the office of the Sacramento County Recorder in Book 113 at Page 2; thence Northerly along the boundary line of said Plat to the Eastern boundary of the Plat of "Larchmont Foothills Unit No. 11" as recorded in the office of the Sacramento County Recorder in Book 129 at Page 19 to the centerline of Daly Avenue; thence Northerly along the centerline of Daly Avenue to the Centerline of Roseville Road; thence Northwesterly along the centerline of Roseville Road to the Southeasterly prolongation of the centerline of Poker Lane; thence Northwesterly along the prolongation of the centerline of Poker Lane and the centerline of Poker Lane to the centerline of Antelope North Road; thence Northeasterly along the centerline of Antelope North Road to the Northern Boundary Line of Sacramento County; thence Westerly along the northerly boundary line of Sacramento County to the west line of Section 11, Township 10 North, Range 5 East, M.D.B. &M.; thence Northerly, along the westerly line of Section 11, one-half mile, more or less, to a road running east and west through the center of Section 11; thence Easterly, along east-west road to the west line of Section 12, Township 10 North, Range 5 East, M.D.B. &M.; thence Northerly, along the west line of Section 12, one-half mile, more or less, to the northwest corner of Section 12; thence Easterly, along the north line of Section 12 to the Range line between Township 10 North, Range 5 East, M.D.B. &M. and Township 10 North, Range 6 East, M.D.B. &M.; thence continuing Easterly, along the north lines of Sections 7, 8, 9 and 10 Township 10 North, Range 6 East, M.D.B. &M. to the northeast corner of Lot 28 as shown on the plat of "Hicken Tract", recorded in the office of the Recorder of Placer County in Book A of Maps, Page 31; thence South 00°03'55" West 20 feet; thence South 00°19'40" East 2635.13 feet, thence South 00°28'00" West 20.22 feet to the southerly line of Booth Road; thence Westerly, along the southerly line of Booth Road the following three (3) courses: 1) South 82°05'00" West 513.96 feet; 2) South 89°18'00" West 292.20 feet; and 3) North 85°19'00" West 237.29 feet; thence leaving the southerly line of Booth Road, and along the Roseville City Limits line South 00°02'00" East 794.50 feet; thence South 89°56'00" East 1038.21 feet to the north-south centerline of Section 10, Township 10 North, Range 6 East, M.D.B. &M.; thence along north-south centerline South 00°28'00" West 367.40 feet to a point in the westerly line of Atkinson Street; thence along the westerly line of Atkinson Street South 33°56'00" East 1221.02 feet; thence along a curve to the right, having a radius of 870 feet, the chord of which bears South 61°12'07" West 810.35 feet, to a point in the northerly line of P.F.E. Road; thence Westerly, along the northerly line of P.F.E. Road, 148 foot to the easterly line of Parcel D as shown on "Parcel Map No. 71906", recorded in the office of the Recorder of Placer County in Book 10 of Parcel Maps at Page 133; thence Northerly, along the easterly line of Parcel D, 1564.15 feet, more or less, to the northeast corner of Parcel D; thence Westerly, along the northerly line of Parcel D and the northerly line of Parcels B and C of the Parcel Map, 1629 feet, more or less, to the northwest corner of
Parcel B; thence Southerly, along the westerly line of Parcel B and its southerly prolongation, 1631.43 feet, more or less, to the southerly line of P.F.E. Road; thence, along the southerly line of P.F.E. Road, North 89°07'01" East 636.84 feet; thence South 00°02'00" East 450 feet; thence South 89°59'00" West 96.80 feet to the westerly line of Section 15, Township 10 North, Range 6 East, M.D.B. &M.; thence along the westerly line of Section 15, South 00°02'00 East 1412.00 feet to the northerly boundary line of Sacramento County; thence Easterly along the northerly line of Sacramento County to the centerline of Interstate 80; thence Northeasterly, along the centerline of Interstate 80 to its intersection with the east-west centerline of Section 14, Township 10 North, Range 6 East, M.D.B. &M.; thence Easterly, along the east-west centerline of Section 14 to the southerly prolongation of the east line of Lots 5 and 6 as shown on the plat of "Livoti Tract", recorded in the office of the Recorder of Placer County in Book E of Maps at Page 5; thence Northerly, along the east line of Lots 5 and 6 and its southerly and northerly prolongation 660 feet, more or less, to the northerly right of way line of Livoti Avenue; thence Easterly, along the northerly line of Livoti Avenue 210.13 feet, to the easterly line of Lot 26 of "Livoti Tract"; thence Northerly, along the easterly line of Lot 26, 227 feet, more or less, to a point 3.00 feet northerly of the northerly line of Lot 25 of "Livoti Tract"; thence Easterly, along a line parallel with and 3.00 feet northerly of the northerly line of Lot 25, 138.75 feet; thence Northerly, along a line parallel with and 138.75 feet easterly of the easterly line of Lot 26, 445.23 feet to the northerly line of "Livoti Tract"; thence along the northerly line of "Livoti Tract", North 89°22'20" East 1712.24 feet to the northeast corner of "Livoti Tract"; thence Southerly, along the easterly line of "Livoti Tract", also being the westerly line of Section 13, Township 10 North, Range 6 East, M.D.B. &M., 1332.60 feet to the southwest corner of the Northwest one-quarter of Section 13; thence Easterly, along the southerly line of the Northwest one-quarter of Section 13, 2640 feet, more or less, to the westerly line of Sunrise Boulevard; thence Southerly, along the westerly line of Sunrise Boulevard 112 feet, more or less, to its intersection with the westerly prolongation of the north line of the parcel of land conveyed to Charles R. and Marjory A. Knoche and recorded in Volume 1138 of Official Records of Placer County at Page 138; thence East, along the westerly prolongation of the north line of the Knoche parcel to the east line of Sunrise Boulevard; thence continuing East, along the north line of the Knoche parcel, 344.67 feet to the northeast corner of Knoche parcel, said northwest corner of the Knoche parcel being a point on the east line of Lot 166, as shown on the plat of "Citrus Heights Addition No. 8" recorded in the Placer County Recorder's Office in Book C of Maps, Page 53; thence South 00°01'00" East 635.60 feet along the east line of Lot 166 to a point on the northerly line of Sacramento County; thence South 84°18'41" East 994.92 feet, along the Sacramento County Line to a point on the east line of Lot 169, as shown on "Citrus Heights Addition No. 8"; thence North 00°01'00" West 845.91 feet, along the east line of Lot 169 to the northeast corner of Lot 169, also being a point on the south line of the North one-half of Section 13, Township 10 North, Range 6 East; thence Easterly 652 feet, more or less, along the south line of the North one-half of Section 13 to the northwest corner of
Lot 172, as shown on "Citrus Heights Addition No. 8"; thence Southerly, along the west line of Lot 172, 906.6 feet, more or less, to the Sacramento County line; thence along the Sacramento County line, South 85°18'30" East 6391 feet, more or less, to the easterly right of way line of Old Auburn Road; thence along the easterly right of way line of Old Auburn Road the following five (5) courses: 1) North 50°33'00" East 120 feet; 2) along a curve to the left, having a radius of 90.3 feet, the chord of which bears North 21°15'00" East 89.3 feet; 3) North 08°41'50" West 413.2 feet; 4) along a curve to the right, having a radius of 330 feet, the chord of which bears North 14°16'50" West 257.6 feet; and 5) North 37°14'50" East 815 feet; thence North 30 feet to the centerline of Old Auburn Road; thence Easterly, along the centerline of Old Auburn Road 4100 feet, more or less, to the centerline of Sierra College Boulevard; thence Southerly, along the centerline of Sierra College Boulevard to the Sacramento County line; thence Easterly along the Sacramento County Line to a point on the boundary line of the 75-foot wide canal described that certain Deed to San Juan Suburban Water District recorded in the office of the Recorder of Placer County in Book 664 of Official Records at Page 618; thence Northerly and Easterly along the canal described in said deed to the Northerly line of Section 23; thence Easterly along the Northerly line of Section 23 to the Westerly line of Folsom Auburn Road; thence Southerly along the Westerly line of Folsom Auburn Road to the northerly boundary line of Sacramento County; thence Easterly and Southerly along the northerly and easterly boundary line of Sacramento County to the point of beginning.

Ward 2

Beginning at a point of intersection of the Easterly Boundary Line of Sacramento County and the centerline of Green Valley Road; thence Southwesterly along Green Valley Road to the centerline of Cummings Way; thence Westerly and Southerly along the centerline of Cummings Way to the centerline of East Natoma Street; thence Westerly along the centerline of East Natoma Street to the centerline of the two hundred (200') foot wide easement to Sacramento Municipal Utility District as described in the Final Order of Condemnation recorded in the office of the Sacramento County Recorder in Book 3277, at Page 346 of Official Records; thence Southeasterly along the centerline of said easement to the centerline of the two hundred (200') foot wide easement to Sacramento Municipal Utility District as described in the deed recorded in the office of the Sacramento County Recorder in Book 2998, at Page 399 of Official Records; thence Southeasterly along the centerline of last said easement to the centerline of the two hundred (200') foot wide easement to Sacramento Municipal Utility District as described in the Final Order of Condemnation recorded in the office of the Sacramento County Recorder in Book 3277, at Page 346 of Official Records; thence Southeasterly along the centerline of last said easement to the centerline of Oak Avenue Parkway; thence southeasterly along the centerline of Oak Avenue Parkway to the centerline of Blue Ravine Road; thence Southwesterly along the centerline of Blue Ravine Road to the Northeasterly prolongation.
of the Southerly Parcel line of Parcel 7 as described in the Quitclaim Deed recorded in the office of the Sacramento County Recorder in Book 19960906 at Page 1665; thence Southwesterly along the Northeasterly prolongation of said parcel and along the Southerly Parcel Line of said parcel to the centerline of Sibley Street; thence Southerly along the centerline of Sibley Street to merge with the centerline of Prairie City Road; thence Southerly and Southeasterly along the centerline of Prairie City Road to the City of Folsom Boundary Line; thence Westerly and Southwesterly along the City of Folsom Boundary Line to the centerline of Aerojet Road; thence Northwesterly along the City of Folsom Boundary Line and the centerline of Aerojet Road to the centerline of US Highway 50 (the El Dorado Freeway); thence Southwesterly along the centerline of US Highway 50 (the El Dorado Freeway) to the centerline of Hazel Avenue; thence Northwesterly along the centerline of Hazel Avenue to the centerline of the American River; thence Southwesterly, along the centerline of the American River to a point on the northerly prolongation of the west line of the plat of "Larchmont Riviera East Unit No. 2", recorded in the office of the Recorder of Sacramento County on July 7, 1970, in Book 85 of Maps, Map No. 16; thence Southerly, along the northerly prolongation of the west line of "Larchmont Riviera East Unit No. 2" and the west line of "Larchmont Riviera East Unit No. 2" to the northwest corner of the plat of "Larchmont Riviera East Unit No. 2", recorded in the office of the Recorder of Sacramento County on September 10, 1969, in Book 84 of Maps, Map No. 15; thence South 105.00 feet, along the west line of "Larchmont Riviera East Unit No. 2", to the southwest corner of Lot 73 as shown on "Larchmont Riviera East Unit No. 1"; thence Southeasterly along the centerline of Hyannis Way; thence Southerly, along the centerline of Hyannis Way to the centerline of Bradshaw Road; thence Southerly along the centerline of Bradshaw Road to the centerline of Jackson Highway (CA State Route 16); thence Southeasterly along the centerline of Jackson Highway (CA State Route 16) to the centerline of Sunrise Boulevard; thence Southerly along the centerline of Sunrise Boulevard to the centerline of Grant Line Road; thence Southwesterly along the centerline of Grant Line Road to the centerline of Calvine Road; thence Westerly along the centerline of Calvine Road to the centerline of Elk Grove Florin Road; thence Southerly along the centerline of Elk Grove Florin Road to the centerline of Elk Grove Boulevard; thence Easterly along the centerline of Elk Grove Boulevard to the centerline of Waterman Road; thence Southerly along the centerline of Waterman Road to the centerline of Grant Line Road; thence Southwesterly along the centerline of Grant Line Road to the centerline of the Southern Pacific Transportation Company's Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad); thence Southeasterly along the centerline of the Southern Pacific Transportation Company's Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad) to the centerline of the Cosumnes River; thence Southwesterly along the centerline of the Cosumnes River to the Easterly prolongation of the Northern Parcel line of the Parcel as described in the Grant Deed recorded by the Sacramento County Recorder’s Office in Book 20080606 at Page 1041; then Westerly along the Easterly prolongation of and along the Northern Parcel Line of
said parcel to the Sacramento County Boundary Line; thence Southeasterly and Easterly along the Sacramento County Boundary Line to the Southeastern most point of the Sacramento County Boundary Line; thence Northerly and Northwesterly along the Sacramento County Boundary Line to the point of beginning.

**Ward 3**

Beginning at a point which is the intersection of the centerline of Howe Avenue with the centerline of Marconi Avenue; thence from said point of beginning Northwesterly along the centerline of Marconi Avenue to the centerline of the Southern Pacific Transportation Company’s Sacramento-Salt Lake City Right of Way (now owned by Union Pacific Railroad); thence Southwesterly along the centerline of the Southern Pacific Transportation Company’s Sacramento-Salt Lake City Right of Way (now owned by Union Pacific Railroad) to the centerline of the Capitol City Freeway (Business 80); thence Southwesterly along the centerline of the Capitol City Freeway (Business 80) to the centerline of R Street; thence Southeasterly along the centerline of R street to the centerline of what was previously known as R Street as shown on the Parcel Map recorded in Book 42 of Parcel Maps, at Page 40 in the Sacramento County Recorder’s Office; thence Southeasterly along the centerline of what was previously known as R Street to the centerline of Stockton Boulevard; thence Southeasterly along the centerline of Stockton Boulevard to the centerline of Broadway; thence Easterly, along the centerline of Broadway to the centerline of 57th Street; thence Northerly along the centerline of 57th Street to the centerline of T Street; thence Southeasterly along the centerline of T Street to the centerline of 59th Street; thence Northerly along the centerline of 59th Street to the centerline of Eastbound US Highway 50, thence Easterly along the centerline of Eastbound US Highway 50 to the Eastbound 65th Street Off-Ramp of US Highway 50; thence Easterly along the centerline of the Eastbound 65th Street Off-Ramp of US Highway 50 to the centerline of 65th Street; thence Northerly along the centerline of 65th Street to the centerline of Eastbound US Highway 50; thence Easterly along the centerline of Eastbound US Highway 50 to the centerline of the Southern Pacific Transportation Company’s Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad); thence Southeasterly along the centerline of the Southern Pacific Transportation Company’s Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad) to the centerline of Power Inn Road; thence Southerly, along the centerline of Power Inn Road to the centerline of Elsie Avenue; thence Westerly along the centerline of Elsie Avenue to the centerline of Stockton Boulevard; thence Southeasterly along the centerline of Stockton Boulevard and its southerly prolongation to the centerline of California State Highway 99; thence Southerly along the centerline of California State Highway 99 to the Westerly prolongation of the centerline of Geneva Pointe (formerly Old Calvine Road); thence Easterly along the prolongation of the centerline of Geneva Pointe (formerly Old Calvine Road) and the centerline of Geneva Pointe to the centerline of
Calvine Road; then Easterly along the centerline of Calvine Road to the centerline of Grant Line Road; thence Northeasterly along the centerline of Grant Line Road to the centerline of Sunrise Boulevard; then Northerly along the centerline of Sunrise Boulevard to the centerline of Jackson Highway (CA State Route 16); thence Northwesterly along the centerline of Jackson Highway (CA State Route 16) to the centerline of Bradshaw Road; thence Northerly, along the centerline of Bradshaw Road to the centerline of Hyannis Way; thence Northerly, along the centerline of Hyannis Way and its northerly prolongation to the southwest corner of Lot 73, as shown on the plat of "Larchmont Riviera East Unit No. 1", recorded in the office of the Recorder of Sacramento County on September 10, 1969, in Book 84 or Maps, Map No. 15; thence North 105.00 feet, along the west line of "Larchmont Riviera East Unit No. 1", to the northwest corner of "Larchmont Riviera East Unit No. 1"; thence Northerly, along the west line of "Larchmont Riviera East Unit No. 2" recorded in the office of the Recorder of Sacramento County on July 7, 1970 in Book 85 of Maps, Map No. 16, and the northerly prolongation of the west line of "Larchmont Riviera East Unit No. 2" to the centerline of the American River; thence Northeasterly, along the centerline of the American River to the southeasterly prolongation of the centerline of Arden Way; thence Northwesterly, along the prolongation of the centerline of Arden Way and the centerline of Arden Way to the centerline of Watt Avenue; thence North along the centerline of Watt Avenue to the centerline Marconi Avenue; thence West along the centerline of Marconi Avenue to the centerline of Howe Avenue, said point being the point of beginning.

Ward 4

Beginning at the intersection of the centerline of the Sacramento River and the Sacramento County Boundary with the westerly prolongation of Broadway; thence from said point of beginning Southeasterly, along the westerly prolongation of Broadway and the centerline of Broadway to the centerline of Franklin Boulevard; thence Southerly along the centerline of Franklin Boulevard to the centerline of Sutterville Road; thence Southwesterly along the centerline of Sutterville Road to the centerline of Freeport Boulevard; thence Southerly, along the centerline of Freeport Boulevard to the centerline of Fruitridge Road; thence Westerly along the centerline of Fruitridge Road to the easterly line of the Record of Survey entitled "A Portion of the East 1/2 of Section 2 and the NE 1/4 of Section 11, Township 7 North, Range 4 East, Mount Diablo Meridian and a Portion of Sections 14, 23, 26, and 35, Township 8 North, Range 4 East, Mount Diablo Meridian", recorded in the office of the Recorder of Sacramento County on November 25, 1991, in Book 49 of Surveys at Page 29; thence Southerly, Easterly, Southerly, and Westerly along the easterly line of said Record of Survey recorded in Book 49 of Surveys at Page 29 to the centerline of Park Village Street; thence Southerly along the centerline of Park Village Street and the southerly prolongation of Park Village Street to the centerline of Freeport Boulevard; thence Southerly along the centerline of Freeport Boulevard and the southerly prolongation of Freeport Boulevard to the centerline of Interstate 5; thence Southeasterly,
along the centerline of Interstate 5 to the centerline of Morrison Creek; thence Northeasterly, along the centerline of Morrison Creek to the centerline of Union House Creek (otherwise known as Beacon Creek); thence Easterly, along the centerline of Union House Creek (otherwise known as Beacon Creek) to the centerline of Franklin Boulevard; thence Southerly, along the centerline of Franklin Boulevard to the centerline of Calvine Road; thence Easterly along the centerline of Calvine Road to the centerline of Bruceville Road; thence Northerly along the centerline of Bruceville Road to the centerline of Shasta Avenue; thence Easterly along the centerline of Shasta Avenue to the centerline of California State Highway 99; thence Northwesterly along the centerline of California State Highway 99 to the Westerly prolongation of the centerline of Geneva Pointe (formerly Old Calvine Road); thence Easterly along the Westerly prolongation of the centerline of Geneva Pointe (formerly Old Calvine Road) and the centerline of Geneva Pointe to the centerline of Calvine Road; then Easterly along the centerline of Calvine Road to the centerline of centerline of Elk Grove Florin Road; thence Southerly along the centerline of Elk Grove Florin Road to the centerline of Elk Grove Boulevard; thence Easterly along the centerline of Elk Grove Boulevard to the centerline of Waterman Road; thence Southerly along the centerline of Waterman Road to the centerline of Grant Line Road; thence Southwesterly along the centerline of Grant Line Road to the centerline of the Southern Pacific Transportation Company's Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad); thence Southeasterly along the centerline of the Southern Pacific Transportation Company's Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad) to the centerline of the Cosumnes River; thence Southwesterly along the centerline of the Cosumnes River to the Easterly prolongation of the Northern Parcel line of the Parcel as described in the Grant Deed recorded by the Sacramento County Recorder’s Office in Book 20080606 at Page 1041; thence Westerly along the Easterly prolongation of and along the Northern Parcel Line of said parcel to the Sacramento County Boundary Line and the centerline of the Mokelumne River; thence Southwesterly, along the centerline of the Mokelumne River to a point located South 85°45'00" East 1534.5 feet and South 76°45'00" East 1181.4 feet from the most southerly corner of Tract 2 as shown on the "Amended Plat of Survey of Property of Green, Harley, Marsh, and Sansforth", recorded in the office of the Recorder of Sacramento County in Book 3 of Surveys at Page 51; thence North 76°45'00" West 1181.4 feet; thence North 85°45'00" West 1534.5 feet to the most southerly corner of Tract 2; thence North 57°32'00" West 1458.64 feet, along the south line of Tract 2 to the easterly right of way line of the Southern Pacific Railroad (now abandoned); thence Southerly, along the easterly right of way line of the Southern Pacific Railroad (now abandoned); to the south line of that certain Record of Survey recorded in the office of the Recorder of Sacramento County in Book 3 of Surveys at Page 100; thence Westerly, along the south line of the Record of Survey recorded in Book 3 of Surveys at Page 100, to the westerly right of way line of the Southern Pacific Railroad (now abandoned); thence Northerly, along the westerly right of way line of the Southern Pacific Railroad (now abandoned); to the westerly line of Race
Track Road; thence Northerly, along the westerly line of Race Track Road to the most southerly corner of Parcel B as shown on the Parcel Map entitled "Swamp Land Survey No 336 Located on Tyler Island", recorded in the office of the Recorder of Sacramento County on September 30, 1985, in Book 89 of Parcel Maps at Page 12; thence North 64°12'51" West along the southwesterly line of the Parcel Map recorded in Book 89 of Parcel Maps at Page 12, and along it's northwesterly prolongation to the centerline of Georgiana Slough; thence Northeasterly, along the centerline of Georgiana Slough to the centerline of the Sacramento River; thence Northerly, along the centerline of the Sacramento River and the Sacramento County Boundary line to a point on westerly prolongation of the centerline of Broadway, said point being the point of beginning.

Ward 5

Beginning at the intersection of the Northerly boundary line of Sacramento County and the centerline of 16th Street; thence from said point of beginning Southerly along the centerline of 16th Street to the centerline of U Street; thence Easterly along the centerline of U Street and the easterly prolongation of U Street to the Northerly line of 24th Street; thence at right angles, Southerly to the centerline of 24th Street; thence Southwesterly along the centerline of 24th Street the easterly prolongation of the south line of Parcel 3 as shown on the Parcel Map recorded in Book 132 of Parcel Maps, at Page 22 in the office of the Sacramento County Recorder; thence Westerly along said easterly prolongation and the south line of said Parcel 3 to the centerline of Dry Creek; thence Southwesterly along the centerline of Dry Creek to the centerline of Q Street; thence Easterly along the centerline of Q Street to the centerline of 18th Street; thence Southerly along the centerline of 18th Street the easterly prolongation of the Centerline of Ascot Avenue; thence Easterly along the centerline of Ascot Avenue to the City of Sacramento City Limit Line as shown on the Record of Survey entitled “McClellan Park” recorded in the office of the Recorder of Sacramento County on December 31, 2001 in Book 61 of Records of Survey at Page 25; thence following said City of Sacramento City Limit Line in the Southerly direction to the centerline of North Avenue; thence Easterly along the centerline of North Avenue and the Easterly prolongation of North Avenue to the centerline of the Southern Pacific Transportation Company's Sacramento-Salt Lake City Right of Way (now owned by Union Pacific Railroad); thence Southwesterly, along the centerline of the Southern Pacific Transportation Company's Sacramento-Salt Lake City Right of Way (now owned by Union Pacific Railroad) to the centerline of the Capitol City Freeway (Business 80); thence Southwesterly along the centerline of the Capitol City Freeway (Business 80) to the centerline of R Street; thence Easterly along the centerline of R Street to the centerline of Alhambra Boulevard; thence Southerly along the centerline of Alhambra Boulevard to the centerline of Broadway; thence Westerly, along the centerline of Broadway and its westerly
prolongation to the centerline of the Sacramento River; thence Northerly, along the centerline of the Sacramento River to its intersection with the northerly boundary line of Sacramento County and the southerly boundary line of Sutter County; thence Easterly, along the northerly boundary line of Sacramento County to a point on the centerline of 16th Street, said point being the point of beginning.

Ward 6

Beginning at the intersection of the centerline of Alhambra Boulevard and the centerline of what was previously known as R Street as shown in Parcel Map recorded at Book 42 at Page 40 in the Sacramento County Recorder’s Office; thence Southeasterly along the centerline of said R Street to the centerline of Stockton Boulevard; thence Southeasterly along the centerline of Stockton Boulevard to the centerline of Broadway; thence Easterly, along the centerline of Broadway to the centerline of 57th Street; thence Northerly along the centerline of 57th Street to the centerline of T Street; thence Southeasterly along the centerline of T Street to the centerline of 59th Street; thence Northerly along the centerline of 59th Street to the to the centerline of Eastbound US Highway 50, thence Easterly along the centerline of Eastbound US Highway 50 to the centerline of the Eastbound 65th Street Off-Ramp of US Highway 50; thence Easterly along the centerline of the Eastbound 65th Street Off-Ramp of US Highway 50 to the centerline of 65th Street; thence Northerly along the centerline of 65th Street to the centerline of Eastbound US Highway 50; thence Easterly along the centerline of Eastbound US Highway 50 to the centerline of the Southern Pacific Transportation Company's Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad); thence Southeasterly, along the centerline of the Southern Pacific Transportation Company's Sacramento-Stockton Main Line right of way (now owned by Union Pacific railroad) to the centerline of Power Inn Road; thence Southerly, along the centerline of Power Inn Road to the centerline of Elsie Avenue; thence Westerly along the centerline of Elsie Avenue to the centerline of Stockton Boulevard; thence Southeasterly along the centerline of Stockton Boulevard and its southerly prolongation to the centerline of California State Highway 99; thence Southerly along the centerline of California State Highway 99 to the Easterly prolongation of the centerline of Shasta Avenue; thence Westerly along the Easterly prolongation of the centerline of Shasta Avenue and the centerline of Shasta Avenue to the centerline of Bruceville Road; thence Southerly along the centerline of Bruceville Road to the centerline of Calvine Road; thence Westerly along the centerline of Calvine Road to the centerline of Franklin Boulevard; thence Northerly along the centerline of Franklin Boulevard to the centerline of Union House Creek (otherwise known as Beacon Creek); thence Westerly, along the centerline of Union House Creek (otherwise known as Beacon Creek) to the centerline of Morrison Creek; thence Southwesterly, along the centerline of Morrison Creek to the centerline of Interstate 5; thence Northwesterly, along the centerline of Interstate 5 to the southerly prolongation of the centerline of Freeport Boulevard; thence Northerly along the southerly prolongation of
Freeport Boulevard and Northerly along the centerline of Freeport Boulevard to the southerly prolongation of Park Village Street; thence Northerly along the southerly prolongation of Park Village Street and Northerly along the centerline of Park Village Street to the easterly line of the Record of Survey entitled "A Portion of the East 1/2 of Section 2 and the NE 1/4 of Section 11, Township 7 North, Range 4 East, Mount Diablo Meridian and a Portion of Sections 14, 23, 26, and 35, Township 8 North, Range 4 East, Mount Diablo Meridian", recorded in the office of the Recorder of Sacramento County on November 25, 1991, in Book 49 of Surveys at Page 29; thence Easterly, Northerly, Westerly, and Northerly along the easterly line of said Record of Survey recorded in Book 49 of Surveys at Page 29 to the centerline of Fruitridge Road; thence Easterly, along the centerline of Fruitridge Road to the centerline of Freeport Boulevard; thence Northeasterly along the centerline of Freeport Boulevard to the centerline of Sutterville Road; thence Northeasterly along the centerline of Sutterville Road to the centerline of Franklin Boulevard; thence Northerly along the centerline of Franklin Boulevard to the centerline of Broadway; thence Southeasterly along the centerline of Broadway to the centerline of Alhambra Boulevard; thence Northerly along the centerline of Alhambra Boulevard at to the point of beginning.

Ward 7

Beginning at the point of intersection of the northerly boundary line of Sacramento County and the centerline of Watt Avenue; thence from said point of beginning Westerly along the northerly boundary line of Sacramento County to the centerline of 16th Street; thence Southerly along the centerline of 16th Street to the centerline of U Street; thence Easterly along the centerline of U Street and the easterly prolongation of U Street to the Northerly line of 24th Street; thence at right angles, Southerly to the centerline of 24th Street; thence Southwesterly along the centerline of 24th Street the easterly prolongation of the south line of Parcel 3 as shown on the Parcel Map recorded in Book 132 of Parcel Maps, at Page 22 in the office of the Sacramento County Recorder; thence Westerly along said easterly prolongation and the south line of said Parcel 3 to the centerline of Dry Creek; thence Southwesterly along the centerline of Dry Creek to the centerline of Q Street; thence Easterly along the centerline of Q Street to the centerline of 18th Street; thence Southerly along the centerline of 18th Street to the centerline of Elkhorn Boulevard; thence Southwesterly along the centerline of Elkhorn Boulevard to the centerline of 16th Street; thence Southerly along the centerline of 16th Street to the centerline of Ascot Avenue; thence Easterly along the centerline of Ascot Avenue to the City of Sacramento City Limit Line as shown in the Record of Survey "McClellan Park" recorded in the office of the Sacramento County Recorder on December 31, 2001 at Book 61 and Page 25; thence following said City of Sacramento City Limit Line in the Southerly direction to the centerline of North Avenue; thence easterly along the centerline of North Avenue and the Easterly prolongation of North Avenue to the centerline of the Southern Pacific Transportation
Company's Sacramento-Salt Lake City Right of Way (now owned by Union Pacific Railroad); thence Southwesterly, along the centerline of the Southern Pacific Transportation Company's Sacramento-Salt Lake City Right of Way (now owned by Union Pacific Railroad) to the centerline Marconi Avenue; thence Easterly along the centerline of Marconi Avenue to the centerline of Watt Avenue; thence Southerly along the centerline of Watt Avenue to the centerline of Arden Way; thence Easterly along the centerline of Arden Way to the Southeasterly prolongation of Arden Way; thence along the Southeasterly prolongation of Arden Way to the centerline of the American River; thence Northeasterly along the centerline of the American River to the Southerly prolongation of San Juan Avenue; thence North along the Southerly prolongation of San Juan Avenue and the centerline of San Juan Avenue to the centerline of Winding Way; thence Westerly along the centerline of Winding Way to the centerline of Garfield Avenue; thence Northerly along the centerline of Garfield Avenue to the centerline of Greenback Lane; thence Northwesterly along the centerline of Greenback Lane to the centerline of Interstate Highway 80; thence Northeasterly along the centerline of Interstate Highway 80 to the Southerly prolongation of the Eastern boundary line of the Plat of “Larchmont Foothills Unit No. 9” as recorded in the office of the Sacramento County Recorder in Book 110 at Page 21; thence Northerly along the Southerly prolongation of said Plat and along the Eastern boundary line of said plat to the Eastern boundary of the Plat of “Larchmont Foothills Unit No. 8” as recorded in the office of the Sacramento County Recorder in Book 113 at Page 2; thence Northerly along the boundary line of said Plat to the Eastern boundary of the Plat of “Larchmont Foothills Unit No. 11” as recorded in the office of the Sacramento County Recorder in Book 129 at Page 19 to the centerline of Daly Avenue; thence Northerly along the centerline of Daly Avenue to the Centerline of Roseville Road; thence Northwesterly along the centerline of Roseville Road to the Southeasterly prolongation of the centerline of Poker Lane and the centerline of Poker Lane to the centerline of Antelope North Road; thence Northwesterly along the centerline of Antelope North Road to the Northern Boundary Line of Sacramento County; thence Northwesterly along the Northerly Boundary Line of Sacramento County to a point on the centerline of Watt Avenue, said point of beginning.
NARRATIVE:

Requested Action: Approve the issuance of SMUD 2022 Series J Revenue Refunding Bonds and/or SMUD 2022 Series C Subordinated Electric Revenue Refunding Bonds, authorize the distribution of the Preliminary Official Statement, and authorize the Chief Executive Officer and General Manager, or his designee, to execute documents necessary to complete the refunding transaction or transactions, including the Bond Purchase Agreement or Agreements.

Summary: SMUD has an opportunity to refund approximately $158 million of the 2012 Series Y bonds and capture net present value savings of approximately $22 million. Previously, in 2019, SMUD entered a forward starting interest rate swap to lock in the net present value savings in anticipation of this transaction, since the 2012 Series Y bonds were not eligible to be refunded until near the bond’s call date of 8/15/2022. Staff anticipates either issuing variable rate debt to coincide with the start date of the swap or terminating the swap and issuing fixed rate debt. Either option will result in realizing the projected savings through final bond maturity in 2033 and provide headroom for spending on other programs. If the swap is terminated, the proceeds SMUD receives will reduce the amount of debt needed to be issued, thereby reducing the interest expense for the bonds going forward.

Board Policy: SD-2 Competitive Rates; SD-3 Access to Credit Markets

Benefits: Locks in low interest rates, reduces interest rate risk, and preserves borrowing capacity for future capital spending and liquidity needs. Provides an average of $2.2 million per year in potential debt service savings over an 11-year period, for a net present value of $22 million.

Cost/Budgeted: Transaction expenses are expected to be roughly $0.9 million, which were included in the 2022 Budget. Debt service on the refunded bonds was included in the 2022 budget, and savings going forward will be included in any future budgets and provide for headroom for other spending.

Alternatives: Forgo the opportunity to capture savings.

Affected Parties: Treasury, Accounting

Coordination: Treasury

Presenter: Russell Mills, Director of Risk Management & Treasurer

Additional Links:

SUBJECT: Approve the Issuance of the SMUD 2022 Series J Refunding Bonds and/or SMUD 2022 Series C Subordinated Electric Revenue Refunding Bonds

ITEM NO. (FOR LEGAL USE ONLY)
SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. _________

SIXTY-FIFTH SUPPLEMENTAL RESOLUTION

AUTHORIZING THE ISSUANCE OF

ELECTRIC REVENUE REFUNDING BONDS, 2022 SERIES J

(Supplemental To Resolution No. 6649
Adopted January 7, 1971)

Adopted: May 19, 2022
## TABLE OF CONTENTS

### ARTICLE CXL
2022 SERIES J BONDS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>140.01</td>
<td>Authorization and Terms of 2022 Series J Bonds</td>
<td>2</td>
</tr>
<tr>
<td>140.02</td>
<td>Redemption of 2022 Series J Bonds</td>
<td>4</td>
</tr>
<tr>
<td>140.03</td>
<td>Deposits to Interest Fund and Principal Account</td>
<td>4</td>
</tr>
<tr>
<td>140.04</td>
<td>2022 Series J Sinking Fund</td>
<td>5</td>
</tr>
<tr>
<td>140.05</td>
<td>Form of 2022 Series J Bonds</td>
<td>5</td>
</tr>
<tr>
<td>140.06</td>
<td>Issuance of 2022 Series J Bonds</td>
<td>6</td>
</tr>
<tr>
<td>140.07</td>
<td>Refunding of 2022 Series J Bonds</td>
<td>6</td>
</tr>
<tr>
<td>140.08</td>
<td>Use of Depository</td>
<td>6</td>
</tr>
<tr>
<td>140.09</td>
<td>Tax Covenants</td>
<td>8</td>
</tr>
<tr>
<td>140.10</td>
<td>Terms of 2022 Series J Bonds Subject to the Master Resolution</td>
<td>9</td>
</tr>
<tr>
<td>140.11</td>
<td>Continuing Disclosure</td>
<td>9</td>
</tr>
</tbody>
</table>

### ARTICLE CXLI
INSURANCE PROVISIONS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>141.01</td>
<td>Insurance Agreements</td>
<td>9</td>
</tr>
</tbody>
</table>

### ARTICLE CXLII
AMENDMENT OF MASTER RESOLUTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>142.01</td>
<td>Amendment of Master Resolution</td>
<td>10</td>
</tr>
</tbody>
</table>

### APPENDIX A
FORM OF BOND

### APPENDIX B
FORM OF PROPOSED AMENDMENTS TO MASTER RESOLUTION
RESOLUTION NO. ___________

Sixty-Fifth Supplemental Resolution
(Supplemental To Resolution No. 6649, Adopted January 7, 1971)
Authorizing the Issuance of
Electric Revenue Refunding Bonds, 2022 Series J

WHEREAS, on January 7, 1971, the Board of Directors of the Sacramento Municipal Utility District (the “Board”) adopted its Resolution No. 6649 providing for the issuance of the Sacramento Municipal Utility District’s Electric Revenue Bonds (as supplemented and amended, herein called the “Master Resolution”);

WHEREAS, the Master Resolution provides that the Sacramento Municipal Utility District (the “District”) may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Master Resolution and Article 6a of Chapter 6 of the Municipal Utility District Act (California Public Utilities Code Sections 12850 et seq.) and the Revenue Bond Law of 1941 (California Government Code Section 54300 et seq.) for the purpose of financing improvements and additions to the District’s Electric System;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Master Resolution and California Government Code Section 53580 et seq. for the purpose of refunding revenue bonds;

WHEREAS, the District has determined to issue its 2022 Series J Bonds (as defined herein), in one or more series or subseries (as specified in the hereinafter defined Sales Certificate) and in an aggregate principal amount not to exceed the principal amount described herein, to (i) refund certain series and maturities of the District’s Electric Revenue Bonds (to be identified in the Sales Certificate) (the “Refunded Bonds”), (ii) pay costs of issuance (to the extent specified in the Sales Certificate), (iii) fund a termination payment for the termination of an interest rate swap agreement relating to the issuance of the 2022 Series J Bonds (to the extent specified in the Sales Certificate) and (iv) make deposits to the Reserve Fund or a separate debt service reserve fund (as and if specified in the Sales Certificate);

WHEREAS, the District anticipates that, if necessary or desirable in the judgment of the Treasurer, it may seek commitments from one or more bond insurers (each, a “Bond Insurer”) to issue one or more financial guaranty policies with respect to all or part of the 2022 Series J Bonds, each of which commitments is expected to be conditioned on certain terms and conditions to be set forth in one or more insurance agreements among the applicable Bond Insurer, the Trustee and the District (each, an “Insurance Agreement”);

WHEREAS, Section 8.03 of the Master Resolution provides that the District may amend the Master Resolution by a supplemental resolution to be effective when there shall have
been filed with the District or the Trustee the written consents of the holders and registered owners of 60% of the District’s Electric Revenue Bonds then outstanding; and

WHEREAS, the District has drafted proposed amendments to the Master Resolution which are described in Section 142.01 of this Sixty-Fifth Supplemental Resolution, and the District intends to issue the 2022 Series J Bonds with the provision that each holder of the 2022 Series J Bonds by purchasing the 2022 Series J Bonds is deemed to have consented to the proposed amendments, all as more fully described herein;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Sacramento Municipal Utility District, as follows:

**ARTICLE CXL**

2022 SERIES J BONDS

Section 140.01 Authorization and Terms of 2022 Series J Bonds.

(a) The Board hereby authorizes the issuance of revenue bonds of the District for the purpose of refunding outstanding revenue bonds of the District, in each case in accordance with the Master Resolution and the Sales Certificate. The authorization provided in this paragraph to issue revenue bonds shall include, in addition to the purposes mentioned above, the authorization to issue such bonds for the allocable portion of any original issue discount, underwriting discount, bond insurance premiums, costs of issuance, interest rate swap termination payments, deposits to the Reserve Fund or a separate debt service reserve fund, and other miscellaneous costs necessary or desirable, in the judgment of the Treasurer, to be financed by such bonds.

(b) A sixty-first series of bonds to be issued under the Master Resolution is hereby created. Said bonds shall be known as the “Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2022 Series J” (herein called the “2022 Series J Bonds”). The 2022 Series J Bonds may be issued in one or more series or subs series (as specified in the hereinafter defined Sales Certificate) only in fully registered form. The 2022 Series J Bonds shall be initially registered in the name of “Cede & Co.,” as nominee of The Depository Trust Company ("DTC") and shall be numbered in consecutive order in such manner as is determined by the Trustee. Registered ownership of the 2022 Series J Bonds, or any portion thereof, may not thereafter be transferred except as set forth in Section 140.08.

(c) The 2022 Series J Bonds shall be issued in such aggregate principal amount which, together with the aggregate principal amount of the District’s Subordinated Electric Revenue Refunding Bonds, 2022 Series C, if any, issued and delivered at the same time shall not exceed $170,000,000, shall be dated, shall bear interest at such rate or rates (payable on such dates), not exceeding the maximum rate permitted by law, shall mature and become payable as to principal on such maturity dates in the amounts and subject to such mandatory sinking fund payments on such mandatory sinking fund payment dates, if any, all as set forth in a Sales Certificate to be executed and delivered concurrently with the sale of the 2022 Series J Bonds (the “Sales Certificate”). If all or any portion of the 2022 Series J Bonds are to bear interest at
variable rates of interest, not exceeding the maximum rate permitted by law, the manner of
determining such variable rates of interest shall be as set forth in the Sales Certificate. In
addition to the provisions required pursuant to the terms of this Resolution to be specified in the
Sales Certificate, the Chief Executive Officer and General Manager of the District, any Member
of the Executive Committee of the District, the Treasurer of the District, the Secretary of the
District, or the Chief Financial Officer of the District or the designee of any of them (each an
“Authorized Officer”), on behalf of the District, may set forth in the Sales Certificate such
provisions, in a form approved by its bond counsel and the District’s counsel, as such Authorized
Officer may deem necessary or desirable and consistent with the purpose of this Resolution,
including provisions (i) adding additional covenants and agreements to be observed by the
District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or
ineffective provision contained in the Resolution, or (iii) amending or supplementing any
provision contained herein to the extent necessary to obtain one or more bond insurance policies,
to obtain a rating on any of the 2022 Series J Bonds, or to provide for the issuance of any of the
2022 Series J Bonds if, in the judgment of any Authorized Officer, after consulting with its
municipal advisor, bond counsel and District counsel, such insurance, rating or provision is
reasonable. Any Authorized Officer, acting alone, is hereby authorized and instructed to execute
and deliver the Sales Certificate and, upon execution and delivery thereof, the Sales Certificate
shall be incorporated herein and in the Master Resolution by reference. The execution and
delivery of the Sales Certificate shall be conclusive evidence that, where any judgment or
determination of reasonableness is required to be made by the person signing said Sales
Certificate, such judgment or determination has been made.

(d) Notwithstanding the foregoing, the Sales Certificate shall not specify (i) a
true interest cost on all 2022 Series J Bonds bearing interest at fixed rates of interest in excess of
3.85%; or (ii) a maturity date for any 2022 Series J Bond later than forty (40) years after the
dated date of such 2022 Series J Bond.

(e) Interest on the 2022 Series J Bonds shall be calculated on the basis and be
payable on the dates set forth in the Sales Certificate, to the registered owners thereof as of the
record dates specified in the Sales Certificate.

(f) Pursuant to Section 5.04 of the Master Resolution, the Sales Certificate
shall specify whether the 2022 Series J Bonds or any series or subseries thereof are to be secured
by (A) the Reserve Fund, (B) a separate debt service reserve fund, or (C) neither (A) nor (B). If
the Sales Certificate provides that the 2022 Series J Bonds or any series or subseries thereof are
to be secured by a separate debt service reserve fund, such Sales Certificate may provide for the
creation of such funds or accounts in furtherance thereof as may be deemed appropriate in the
Treasurer’s discretion, and such funds or accounts shall be held in trust by the District or the
Trustee, as specified in the Sales Certificate, solely for the benefit of the Holders of the 2022
Series J Bonds or applicable series or subseries thereof, and is hereby pledged solely to the
payment of the 2022 Series J Bonds or applicable series or subseries thereof, subject to the
application thereof for the purposes set forth in the Sales Certificate. If a separate debt service
reserve fund is so created, the Sales Certificate may further specify such other terms and
provision relating thereto, as in the Treasurer’s discretion are appropriate, including, without
implied limitation, the minimum balance required to be maintained on deposit therein, the
purposes for which moneys on deposit therein may or shall be applied, the terms on which any
deficiencies therein are to be replenished, additional limitations concerning investment of moneys therein and the valuation thereof, and provisions concerning the deposit of credit instruments in lieu of cash therein.

(g) The Sales Certificate shall designate the series, amounts and maturity or sinking fund payment dates of the Refunded Bonds.

Section 140.02 Redemption of 2022 Series J Bonds. The 2022 Series J Bonds shall be subject to redemption on the terms set forth below and in the Sales Certificate (which may specify that some or all of the 2022 Series J Bonds will not be subject to redemption).

(a) Notice of Redemption. If any of the 2022 Series J Bonds are subject to redemption, then in addition to the notice of redemption required to be given pursuant to Article IV of the Master Resolution, the Trustee shall mail, by first class mail, postage prepaid, notice of redemption of any 2022 Series J Bond to the Securities Depositories. Failure of the Trustee to give notice of redemption to any Securities Depository, or any defect therein, however, shall not affect the sufficiency of the proceedings of redemption with respect to any 2022 Series J Bond. For purposes of this paragraph, the following term shall have the following meaning:

“Securities Depositories” means DTC, 55 Water Street, 50th Floor, New York, N.Y. 10041-0099 Attn. Call Notification Department, Fax (212) 855-7232; or, in accordance with the current guidelines of the Securities and Exchange Commission, to such other address and/or such other securities depositories as the District may designate to the Trustee in writing.

Notwithstanding any contrary provision of Article IV of the Master Resolution or this Sixty-Fifth Supplemental Resolution, (1) publication of any notice of redemption shall not be required with respect to the 2022 Series J Bonds, so long as such 2022 Series J Bonds are in full book-entry form, (2) any notice of redemption of the 2022 Series J Bonds shall be mailed not less than twenty (20) nor more than sixty (60) days prior to the redemption date, and (3) any notice of optional redemption may be made conditional on the receipt of money or any other condition.

(b) Redemption Otherwise Subject to Article IV. Except as in this Section and in the Sales Certificate otherwise provided, the redemption of 2022 Series J Bonds shall be subject to the provisions of Article IV of the Master Resolution.

Section 140.03 Deposits to Interest Fund and Principal Account. Notwithstanding any contrary provision of the Resolution, the Treasurer, out of Net Revenues received by the District, shall set aside in the Interest Fund and the Principal Account, respectively, such amounts as may be required so that an amount equal to the amount of principal and/or interest becoming due and payable on the 2022 Series J Bonds on each interest payment date and principal payment date is on deposit in the Interest Fund and the Principal Account, respectively, at such time on or prior to such interest payment date or principal payment date as shall be specified in the Sales Certificate.
Section 140.04   2022 Series J Sinking Fund.

(a) An account is hereby established within the Sinking Fund created by Section 5.02 of the Master Resolution to be designated the “2022 Series J Sinking Fund.” On or before each minimum sinking fund payment date for any 2022 Series J Bonds set forth in the Sales Certificate, the Treasurer shall deposit in the 2022 Series J Sinking Fund, out of Net Revenues received by the District, such amounts as may be required to cause the balance therein to be equal to the amount of the minimum sinking fund payment due and payable on the 2022 Series J Bonds on such minimum sinking fund payment date as set forth in the Sales Certificate.

(b) The District shall apply all such minimum sinking fund payments, as rapidly as practicable, to the purchase of 2022 Series J Bonds at public or private sale, as and when and at such prices (including brokerage and other expenses, but excluding accrued interest, which is payable from the Interest Fund) as the District may in its discretion determine.

(c) If on the first day of the month preceding the month in which a minimum sinking fund payment date occurs, as set forth in the Sales Certificate, the moneys in the 2022 Series J Sinking Fund equal or exceed $25,000, such moneys shall be applied by the District to the redemption on such minimum sinking fund payment date of as many 2022 Series J Bonds as such moneys in the 2022 Series J Sinking Fund shall suffice to redeem at a redemption price equal to the principal amount thereof (except that accrued interest on such 2022 Series J Bonds so called for redemption shall be paid from the Interest Fund). All 2022 Series J Bonds purchased or redeemed under the provisions of this Section shall be delivered to, and canceled by, the Trustee and shall not be reissued.

(d) No application of any moneys to the retirement of 2022 Series J Bonds shall operate to impair or affect the obligation of the District to make minimum sinking fund payments for 2022 Series J Bonds in the amounts and at the times provided in this Section; however, the District shall not be deemed to be in default with respect to any 2022 Series J Bonds minimum sinking fund payment for any minimum sinking fund payment date if at all times prior to such minimum sinking fund payment date the District shall have fixed rates and charges as required by Section 6.08 of the Master Resolution, and if at such minimum sinking fund payment date the aggregate principal amount of all 2022 Series J Bonds theretofore purchased or redeemed through the operation of the 2022 Series J Sinking Fund or otherwise (together with any moneys then in the 2022 Series J Sinking Fund) equals or exceeds the aggregate amount of minimum sinking fund payments for 2022 Series J Bonds then and theretofore required to be made pursuant to this Section.

(e) Any moneys remaining in the 2022 Series J Sinking Fund after all 2022 Series J Bonds have been retired shall be returned to the District for any lawful District use.

Section 140.05   Form of 2022 Series J Bonds. The 2022 Series J Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Appendix A to this Sixty-Fifth Supplemental Resolution. The series or subseries designations, numbers, maturity dates, interest rates, method or methods of determining interest rates, redemption provisions and other terms of the 2022 Series J Bonds shall be inserted therein in conformity with the Sales Certificate.
Section 140.06  Issuance of 2022 Series J Bonds.

(a) At any time after the adoption of this Sixty-Fifth Supplemental Resolution and the execution and delivery of the Sales Certificate, the District may execute and deliver the 2022 Series J Bonds in the aggregate principal amount set forth in the Sales Certificate, but not to exceed the aggregate principal amount described in Section 140.01(c).

(b) The Trustee shall authenticate and deliver the 2022 Series J Bonds upon written order of the District.

(c) The proceeds of the sale of the 2022 Series J Bonds shall be set aside and applied by the Treasurer as set forth in the Sales Certificate.

Section 140.07  Refunding of 2022 Series J Bonds. If Refunding Bonds are issued for the purpose of refunding 2022 Series J Bonds, then, in addition to any other provisions of Section 3.05 of the Master Resolution, the District is authorized to apply proceeds of the sale of such Refunding Bonds to the payment of the purchase price of direct non-callable obligations of the United States of America (“Treasury Obligations”) to be held by the Trustee to insure the payment or retirement at or before maturity of all or a portion of the outstanding 2022 Series J Bonds. Upon deposit with the Trustee, in trust, of money or Treasury Obligations (including, but not limited to, direct obligations of the United States of America issued in book-entry form on the books of the Department of the Treasury of the United States of America), or any combination thereof, sufficient, together with the interest to accrue on any such Treasury Obligations, to pay or redeem all or a portion of 2022 Series J Bonds then outstanding at or before their maturity date, provided that, in the case of 2022 Series J Bonds which are to be redeemed prior to maturity, notice of such redemption shall have been given as provided in Article IV of the Master Resolution or provision satisfactory to the Trustee shall have been made for the giving of such notice, all liability of the District in respect of such 2022 Series J Bonds shall cease, determine and be completely discharged, and the holders thereof shall thereafter be entitled only to payment by the District out of the money and Treasury Obligations deposited with the Trustee as aforesaid for their payment, subject, however, to the provisions of Section 10.03 of the Master Resolution. If the liability of the District shall cease and determine with respect to all or a portion of the 2022 Series J Bonds as above provided, then said 2022 Series J Bonds shall not be considered to be outstanding Bonds for any purpose of the Master Resolution or of this Sixty-Fifth Supplemental Resolution.

Section 140.08  Use of Depository. Notwithstanding any provision of the Master Resolution or this Sixty-Fifth Supplemental Resolution to the contrary:

(a) The 2022 Series J Bonds shall be initially issued as provided in Section 140.01. Registered ownership of the 2022 Series J Bonds, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;
(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of Section 140.08(a) hereof, upon receipt of all outstanding 2022 Series J Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2022 Series J Bond shall be executed and delivered for each maturity of each series of 2022 Series J Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of Section 140.08(a) hereof, upon receipt of all outstanding 2022 Series J Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2022 Series J Bonds shall be executed, authenticated and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 140.08(a) hereof, provided the Trustee shall not be required to deliver such new 2022 Series J Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of Section 140.08(a) hereof, the 2022 Series J Bonds shall be transferred as provided in Article II of the Master Resolution.

(c) In the case of partial redemption or refunding of the 2022 Series J Bonds of a series evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on such 2022 Series J Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2022 Series J Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2022 Series J Bond is registered as the Bondholder thereof for all purposes of the Master Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any beneficial owners of the 2022 Series J Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the beneficial owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the holder of any 2022 Series J Bond.
(e) So long as the outstanding 2022 Series J Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2022 Series J Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 140.09 Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2022 Series J Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of the Tax Certificate of the District, dated the date of issuance of the 2022 Series J Bonds, as amended from time to time in accordance with its terms (the “Tax Certificate”). This covenant shall survive payment in full or defeasance of the 2022 Series J Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the “Code”) and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2022 Series J Bonds from time to time (the “Rebate Requirement”). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the Tax Certificate to the United States of America from any Net Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2022 Series J Bonds. Capitalized terms in this Section not otherwise defined in the Master Resolution or this Sixty-Fifth Supplemental Resolution shall have the meanings ascribed to them in the Tax Certificate.

(c) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2022 Series J Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Master Resolution or this Sixty-Fifth Supplemental Resolution or the consent at any time of the Bondholders.

(d) This Section 140.09 shall be inapplicable to the 2022 Series J Bonds, if any, issued bearing interest included in gross income for federal income tax purposes, as set forth in the Sales Certificate.
Section 140.10 Terms of 2022 Series J Bonds Subject to the Master Resolution.

(a) Except as in this Sixty-Fifth Supplemental Resolution expressly provided, every term and condition contained in the Master Resolution shall apply to this Sixty-Fifth Supplemental Resolution and to the 2022 Series J Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Sixty-Fifth Supplemental Resolution.

(b) This Sixty-Fifth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Master Resolution. The Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 140.11 Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of the Continuing Disclosure Agreement dated the date of issuance of the 2022 Series J Bonds (the “Continuing Disclosure Agreement”). Notwithstanding any other provision of the Master Resolution or this Sixty-Fifth Supplemental Resolution, failure of the District or the Trustee to comply with the Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in the Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of outstanding 2022 Series J Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2022 Series J Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2022 Series J Bonds (including persons holding 2022 Series J Bonds through nominees, depositories or other intermediaries).

ARTICLE CXLII

INSURANCE PROVISIONS

Section 141.01 Insurance Agreements. Each Insurance Agreement, if any, is hereby incorporated in this Sixty-Fifth Supplemental Resolution by this reference, and the District covenants and agrees to comply with the terms and conditions thereof. The District further declares, covenants and agrees that the terms and conditions of each Insurance Agreement, if any, shall govern, with respect to the applicable 2022 Series J Bonds, the rights and responsibilities of the District, the Trustee, the applicable Bond Insurer and the holders of the applicable 2022 Series J Bonds, to the extent such terms and conditions may be inconsistent with any other provision of the Master Resolution, as amended and supplemented, including as supplemented by this Sixty-Fifth Supplemental Resolution.
ARTICLE CXLII

AMENDMENT OF MASTER RESOLUTION

Section 142.01 Amendment of Master Resolution. The District intends to amend the Master Resolution substantially in the form of Appendix B to this Sixty-Fifth Supplemental Resolution (the “Proposed Amendments”). The purchasers of the 2022 Series J Bonds, by virtue of their purchase of the 2022 Series J Bonds, have consented to the Proposed Amendments. Pursuant to Section 8.03 of the Master Resolution, the Proposed Amendments shall become effective when the written consents of the holders and registered owners of 60% of the Bonds then outstanding have been filed with the District or the Trustee.
APPENDIX A

FORM OF BOND

No. R-______ $__________

SACRAMENTO MUNICIPAL UTILITY DISTRICT
ELECTRIC REVENUE REFUNDING BOND
2022 SERIES J

Maturity Interest Per Annum Date CUSIP

REGISTERED OWNER: CEDE & CO.

PRINCIPAL AMOUNT:

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (hereinafter called the “District”), for value received, hereby promises to pay (but only out of the Net Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from the date of initial delivery hereof, until the principal hereof shall have been paid, at the interest rate per annum specified above, payable on February 15 and August 15 of each year, commencing February 15, 2023. Interest hereon is payable in lawful money of the United States of America by check or draft mailed on each interest payment date to the registered owner as of the first day of the month (whether or not a business day) in which an interest payment date occurs. Interest hereon shall be calculated on the basis of a 360-day year consisting of twelve 30-day months. At the option of the owners of $1,000,000 or more in aggregate principal amount of Bonds of this series, interest hereon is also payable in lawful money of the United States of America by wire transfer to such address as has been furnished to the Trustee in writing by the registered owner hereof at least 15 days prior to the interest payment date for which such payment by wire transfer is requested. The principal hereof is payable at the designated corporate trust office of U.S. Bank Trust Company, National Association, the Trustee, in lawful money of the United States of America.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Electric Revenue Bonds (hereinafter called the “Bonds”) of the series and designation indicated on the face hereof. Said authorized issue of Bonds is not limited in aggregate principal amount, except as otherwise provided in the Resolution hereinafter mentioned, and consists or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6 of Division 6 of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the “Act”). This
Bond is issued pursuant to a resolution of the Board of Directors of the District, adopted January 7, 1971, providing for the issuance of the Bonds, as amended and supplemented (the “Resolution”), including as amended and supplemented by a Sixty-Fifth Supplemental Resolution, adopted May 19, 2022, authorizing the issuance of the 2022 Series J Bonds. Reference is hereby made to the Resolution and the Act for a description of the terms on which the Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Resolution, and the rights of the registered owners of the Bonds; and all the terms of the Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this Bond, and to all the provisions thereof the registered owner of this Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Resolution.

The Bonds and the interest thereon (to the extent set forth in the Resolution), together with the Parity Bonds (as defined in the Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Revenues derived by the District from the Electric System (as those terms are defined in the Resolution). The District hereby covenants and warrants that for the payment of the Bonds and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Bonds, as such principal and interest become due, and as an irrevocable charge the District has allocated Net Revenues to such payment, all in accordance with the Resolution.

The Bonds are special obligations of the District, and are payable, both as to principal and interest, out of the Net Revenues pertaining to the Electric System, and not out of any other fund or moneys of the District. No holder of this Bond shall ever have the right to compel any exercise of the taxing power of the District to pay this Bond or the interest hereon.

[The 2022 Series J Bonds are not subject to redemption.][Redemption Terms to be Determined at Time of Sale and Conformed to Official Statement and Sales Certificate]

This Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the designated corporate trust office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Resolution, and upon surrender and cancellation of this Bond. Upon such transfer a new fully registered Bond or Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor. No transfer of this Bond will be made during the 15 days next preceding each interest payment date.

The District, the Trustee and any paying agent may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District, the Trustee and any paying agent shall not be affected by any notice to the contrary.

The rights and obligations of the District and of the holders and registered owners of the Bonds may be modified or amended at any time in the manner, to the extent, and upon the
terms provided in the Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption hereof, without the consent of the holder of each Bond so affected, or (ii) reduce the percentage of Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this Bond, and in the issuing of this Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Bonds permitted to be issued under the Resolution.

This Bond shall not be entitled to any benefit under the Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee.
IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has caused this Bond to be executed in its name and on its behalf by the facsimile signature of the President of its Board of Directors and by the facsimile signature of its Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the District to be reproduced hereon by facsimile, and this Bond to be dated as of the date first written above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By____________________________________
President of the Board of Directors

By_____________________________________
Treasurer of the District

(SEAL)

Countersigned:

_____________________________________
Secretary of the District

CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Bonds described in the within-mentioned Resolution and registered on the date set forth below.

Dated: U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By_____________________________________
Authorized Officer
ASSIGNMENT

For value received ____________________ hereby sell, assign and transfer unto ____________________ whose taxpayer identification number is ________________ the within-mentioned Bond and hereby irrevocably constitute and appoint ____________________ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated: __________________

Signature Guaranteed by: ____________________

NOTE: Signature must be guaranteed by an eligible guarantor institution
APPENDIX B

FORM OF PROPOSED AMENDMENTS TO MASTER RESOLUTION

SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. ___-___-

____________ SUPPLEMENTAL RESOLUTION

AMENDING RESOLUTION NO. 6649

(Supplemental to Resolution No. 6649
Adopted January 7, 1971)

Adopted: ___________ __, 20__

B-1
WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on January 7, 1971, adopted its Resolution No. 6649 (as previously supplemented and amended, herein called the “Master Resolution”) providing for the issuance of the District’s Electric Revenue Bonds (the “Bonds”);

WHEREAS, Section 8.03 of the Master Resolution provides that the District may amend the Master Resolution by a supplemental resolution to be effective when there shall have been filed with the District or the Trustee the written consents of the holders and registered owners of 60% of the Bonds then outstanding;

WHEREAS, the Board has determined to amend Sections 1.03, 3.02, 3.06, 5.04 and 6.08 of the Master Resolution, which amendments the Board deems necessary and desirable and not inconsistent with the Master Resolution;

WHEREAS, the District has obtained the consents of the holders and registered owners of 60% of the Bonds outstanding;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Sacramento Municipal Utility District, as follows:

ARTICLE _____

AMENDMENT OF MASTER RESOLUTION

SECTION ___. Amendment of Section 1.03 of Master Resolution. A new definition of “Subsidy” shall be added to Section 1.03 of the Master Resolution in correct alphabetical order to read as follows:

‘Subsidy’

“Subsidy” means any subsidy, reimbursement or other payment from the federal government of the United States of America under the American Recovery and Reinvestment Act of 2009 (or any similar legislation or regulation of the federal government of the United States of America or any other governmental entity or any extension of any of such legislation or regulation).’
SECTION _____. Amendment of Section 3.02 of Master Resolution. A new paragraph shall be added to the end of Section 3.02 of the Master Resolution to read as follows:

“For purposes of the calculations specified in this Section 3.02: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”

SECTION _____. Amendment of Section 3.06 of Master Resolution. A new paragraph shall be added to the end of Section 3.06 of the Master Resolution to read as follows:

“For purposes of the calculations specified in this Section 3.06: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”

SECTION _____. Amendment of Section 5.04 of Master Resolution. A new paragraph shall be added to the end of Section 5.04 of the Master Resolution to read as follows:

“For purposes of calculating the “debt service ratio” and, unless otherwise specified in a Supplemental Resolution providing for the issuance of a series of Parity Bonds, the amount required to be maintained in the Reserve Fund pursuant to this Section 5.04: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”
SECTION _____. Amendment of Section 6.08 of Master Resolution. A new paragraph shall be added to the end of Section 6.08 of the Master Resolution to read as follows:

“For purposes of the calculations specified in this Section 6.08: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that the District receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by the District with respect to or in connection with such Parity Bonds during such period of time.”
SACRAMENTO MUNICIPAL UTILITY DISTRICT

RESOLUTION NO. ________

THIRTEENTH SUPPLEMENTAL RESOLUTION

AUTHORIZING THE ISSUANCE OF

SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS,
2022 SERIES C

Adopted: May 19, 2022

(Supplemental to Resolution No. 85-11-1 adopted November 7, 1985
as amended and restated by Resolution No. 01-06-10 adopted June 21, 2001)
<table>
<thead>
<tr>
<th>ARTICLE LXXV</th>
<th>AUTHORITY AND DEFINITIONS</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 75.01. Supplemental Resolution</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Section 75.02. Definitions; Prevailing Time</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ARTICLE LXXVI</td>
<td>THE 2022C SUBORDINATED BONDS</td>
<td>17</td>
</tr>
<tr>
<td>Section 76.01. Authorization and Purpose of 2022C Subordinated Bonds</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Section 76.02. Terms, Registration, Denominations, Medium, Method and Place of Payment and Dating of 2022C Subordinated Bonds</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Section 76.03. Payment of Principal and Interest of 2022C Subordinated Bonds; Acceptance of Terms and Conditions</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Section 76.04. Calculation and Payment of Interest; Change in Interest Rate Mode; Maximum Rate</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Section 76.05. Determination of Flexible Rates and Interest Periods During Flexible Mode</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Section 76.06. Determination of Interest Rates During the Daily Mode and the Weekly Mode</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Section 76.07. Determination of Term Rates and Fixed Rates</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Section 76.08. Alternate Rates</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Section 76.09. Determination of Direct Purchase Index Rates</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Section 76.10. Determination of Index Rates</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Section 76.11. Changes in Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>ARTICLE LXXVII</td>
<td>REDEMPTION OF 2022C SUBORDINATED BONDS</td>
<td>31</td>
</tr>
<tr>
<td>Section 77.01. Optional Redemption of Flexible Rate Bonds</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Section 77.02. Optional Redemption of 2022C Subordinated Bonds in the Daily Mode and the Weekly Mode</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Section 77.03. Optional Redemption of 2022C Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Section 77.04. Optional and Mandatory Redemption of 2022C Subordinated Bonds in the Direct Purchase Index Mode</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Section 77.05. Mandatory Sinking Fund Account Redemption of 2022C Subordinated Bonds and Redemption of Liquidity Provider Bonds</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Section 77.06. Funds for Redemption of 2022C Subordinated Bonds</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Section 77.07. Selection of 2022C Subordinated Bonds for Redemption</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Section 77.08. Notice of Redemption</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Section 77.09. Partial Redemption of 2022C Subordinated Bond</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Section 77.10. Effect of Redemption</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Section 77.11. Disposition of Redeemed 2022C Subordinated Bonds</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>ARTICLE LXXVIII</td>
<td>PURCHASE OF 2022C SUBORDINATED BONDS</td>
<td>34</td>
</tr>
<tr>
<td>Section 78.01. Optional Tenders of 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>78.02</td>
<td>Mandatory Purchase on Mandatory Purchase Date; Amortization Period</td>
<td>34</td>
</tr>
<tr>
<td>78.03</td>
<td>Remarketing of 2022C Subordinated Bonds; Notices</td>
<td>35</td>
</tr>
<tr>
<td>78.04</td>
<td>Source of Funds for Purchase of 2022C Subordinated Bonds</td>
<td>36</td>
</tr>
<tr>
<td>78.05</td>
<td>Delivery of Subordinated Bonds</td>
<td>37</td>
</tr>
<tr>
<td>78.06</td>
<td>Book-Entry Tenders</td>
<td>38</td>
</tr>
<tr>
<td>78.07</td>
<td>No Book-Entry System</td>
<td>39</td>
</tr>
<tr>
<td>78.08</td>
<td>Credit Enhancement and Liquidity Facility</td>
<td>40</td>
</tr>
<tr>
<td>78.09</td>
<td>Purchase Fund</td>
<td>42</td>
</tr>
<tr>
<td>78.10</td>
<td>Inadequate Funds for Tenders</td>
<td>43</td>
</tr>
<tr>
<td>79.01</td>
<td>Appointment of Remarketing Agent</td>
<td>44</td>
</tr>
<tr>
<td>80.01</td>
<td>2022C Subordinated Sinking Fund Account; Payments of Interest, Principal and Redemption Price and Defeasance While Credit Enhancement in Effect</td>
<td>44</td>
</tr>
<tr>
<td>80.02</td>
<td>Form and Execution of 2022C Subordinated Bonds</td>
<td>46</td>
</tr>
<tr>
<td>80.03</td>
<td>Issuance of 2022C Subordinated Bonds</td>
<td>46</td>
</tr>
<tr>
<td>80.04</td>
<td>Use of Depository</td>
<td>47</td>
</tr>
<tr>
<td>80.05</td>
<td>Tax Covenants</td>
<td>48</td>
</tr>
<tr>
<td>80.06</td>
<td>Rights of Credit Provider</td>
<td>49</td>
</tr>
<tr>
<td>80.07</td>
<td>Limitations on Rights of Trustee</td>
<td>49</td>
</tr>
<tr>
<td>80.08</td>
<td>Terms of 2022C Subordinated Bonds Subject to the Subordinate Master Resolution</td>
<td>50</td>
</tr>
<tr>
<td>80.09</td>
<td>Resolution of Trust to Remain in Effect</td>
<td>50</td>
</tr>
<tr>
<td>80.10</td>
<td>Notice to Rating Agencies</td>
<td>50</td>
</tr>
<tr>
<td>80.11</td>
<td>Continuing Disclosure</td>
<td>51</td>
</tr>
<tr>
<td>80.12</td>
<td>Designation of Credit Provider and Liquidity Provider Reimbursement Obligations as Parity Subordinated Debt; Authorization and Issuance of Revolving Notes</td>
<td>51</td>
</tr>
<tr>
<td>A</td>
<td>EXHIBIT A FORM OF 2022C SUBORDINATED BOND</td>
<td>A-1</td>
</tr>
<tr>
<td>B</td>
<td>EXHIBIT B FORM OF REVOLVING NOTE</td>
<td>B-1</td>
</tr>
</tbody>
</table>
RESOLUTION NO. ____________

Thirteenth Supplemental Resolution
(Supplemental to Resolution No. 85-11-1 Adopted November 7, 1985, as amended and restated by Resolution No. 01-06-10 Adopted June 21, 2001)

Subordinated Electric Revenue Refunding Bonds,
2022 Series C

WHEREAS, the Board of Directors (the “Board”) of the Sacramento Municipal Utility District (the “District”), on November 7, 1985, adopted its Resolution No. 85-11-1 which was amended and restated by Resolution No. 01-06-10, adopted on June 21, 2001, providing for the issuance of the District’s Subordinated Electric Revenue Bonds (as supplemented and amended, herein called the “Subordinate Master Resolution”);

WHEREAS, the Subordinate Master Resolution provides that the District may issue bonds from time to time as the issuance thereof is authorized by the Board by a supplemental resolution;

WHEREAS, revenue bonds may be issued pursuant to the provisions of the Subordinate Master Resolution and the Act (as defined in the Subordinate Master Resolution); and

WHEREAS, the District has determined to issue its Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “2022C Subordinated Bonds”), in the aggregate principal amount determined as set forth in Section 76.02 to (i) refund the outstanding principal amount of the District’s Electric Revenue Refunding Bonds, 2012 Series Y maturing after August 15, 2022 (the “Refunded Bonds”), and (ii) pay costs of issuance (to the extent set forth in the Sales Certificate);

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Sacramento Municipal Utility District, as follows:

ARTICLE LXXV

AUTHORITY AND DEFINITIONS

Section 75.01. Supplemental Resolution. This Thirteenth Supplemental Resolution is supplemental to the Subordinate Master Resolution.

Section 75.02. Definitions; Prevailing Time.

(1) Except as provided by this Thirteenth Supplemental Resolution, all terms which are defined in Section 1.03 of the Subordinate Master Resolution shall have the same meanings in this Thirteenth Supplemental Resolution as such terms are given in said Section 1.03. Unless otherwise provided herein, all references to a particular time are to New York City time. In the event of a conflict between the meanings given in said Section 1.03 and the meanings given in this Section, the meanings given in this Section shall prevail.
In this Thirteenth Supplemental Resolution:

**Alternate Credit Enhancement** shall mean a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof as a replacement or substitute for any Credit Enhancement then in effect and providing for or securing the payment of the principal of and interest on the 2022C Subordinated Bonds.

**Alternate Liquidity Facility** shall mean a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof as a replacement or substitute for any Liquidity Facility then in effect and providing for the payment of the Purchase Price of Tendered Bonds.

**Alternate Rate** shall mean, on any Rate Determination Date, for any Interest Rate Mode other than a Direct Purchase Index Mode, an Index Mode or a Term Rate Mode, a rate per annum equal to 110% of (a) the SIFMA Municipal Swap Index of Municipal Market Data most recently available as of the date of determination, or (b) if such index is no longer available, or if the SIFMA Municipal Swap Index is no longer published, the S&P Municipal Bond 7 Day High Grade Rate Index, or if neither the SIFMA Municipal Swap Index nor the S&P Municipal Bond 7 Day High Grade Rate Index is published, the index determined to equal the prevailing rate determined by the Remarketing Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Remarketing Agent to be comparable under the circumstances to the criteria used by the Securities Industry and Financial Markets Association to determine the SIFMA Municipal Swap Index just prior to when the Securities and Financial Markets Association stopped publishing the SIFMA Municipal Swap Index. The Trustee shall make the determinations required by this definition, upon notification from the District, if there is no Remarketing Agent, if the Remarketing Agent fails to make any such determination or if the Remarketing Agent has suspended its remarketing efforts in accordance with the Remarketing Agreement.

**Amortization End Date** shall have the meaning set forth in the applicable Continuing Covenant Agreement.

**Amortization Interest Payment Date** shall have the meaning set forth in the applicable Continuing Covenant Agreement.

**Amortization Period** shall mean, in the event the 2022C Subordinated Bonds are not purchased or remarketed on any Bank Purchase Date and the other conditions set forth in Section 78.02(b) are satisfied, the period commencing on the Bank Purchase Date and ending on the Amortization End Date.

**Amortization Principal Payment Date** shall have the meaning set forth in the applicable Continuing Covenant Agreement.

**Applicable Factor** shall mean, upon any Conversion to a Direct Purchase Index Rate Period, the percentage of the Direct Purchase Index designated in writing by the District as the Applicable Factor for such Direct Purchase Index Rate Period pursuant to Section 76.09(a); provided, however, that the Applicable Factor shall never be less than 65% unless a Favorable
Opinion of Bond Counsel is delivered in connection with the Conversion to such Direct Purchase Index Rate Period.

**Applicable Spread** shall mean, with respect to any Direct Purchase Index Rate Period, the number of basis points determined by the Market Agent on or before the first day of such Direct Purchase Index Rate Period and designated by the District in accordance with Section 76.09(a) (which may include a schedule for the Applicable Spread based upon the ratings assigned to any indebtedness of the District) that, when added to the product of the Direct Purchase Index multiplied by the Applicable Factor, would equal the minimum interest rate per annum that would enable the 2022C Subordinated Bonds to be sold on such date at a price equal to the principal amount thereof (without regard to accrued interest, if any, thereon).

**Authorized Denominations** shall mean (i) with respect to 2022C Subordinated Bonds in a Daily Mode or Weekly Mode, $100,000 and any integral multiple of $5,000 in excess thereof, (ii) with respect to 2022C Subordinated Bonds in a Flexible Mode, $100,000 and any integral multiple of $1,000 in excess thereof; (iii) with respect to 2022C Subordinated Bonds in a Direct Purchase Index Mode or Index Mode, $100,000 and any integral multiple of $5,000 in excess thereof; and (iv) with respect to 2022C Subordinated Bonds in a Term Rate Mode or a Fixed Rate Mode, $5,000 and any integral multiple thereof.

**Available Amount** shall mean the amount available under a Credit Enhancement or Liquidity Facility, as applicable, to pay the principal of and interest on the 2022C Subordinated Bonds or the Purchase Price of the 2022C Subordinated Bonds, as applicable.

**Available Moneys** shall mean (a) if a Credit Enhancement is in effect, (i) moneys drawn under the Credit Enhancement which at all times since their receipt by the Trustee were held in a separate segregated account or accounts or subaccount or subaccounts in which no moneys (other than those drawn under the Credit Enhancement) were at any time held, (ii) moneys which have been paid to the Trustee and have been on deposit with the Trustee for at least 124 days (or, if paid to the Trustee by an “affiliate,” as defined in Bankruptcy Code §101(2), of the District, 366 days) during and prior to which no Event of Bankruptcy shall have occurred, (iii) any other moneys, if, in the opinion of nationally recognized counsel experienced in bankruptcy matters (which opinion shall be acceptable to each Rating Agency then rating the 2022C Subordinated Bonds), the application of such moneys will not constitute a voidable preference in the event of the occurrence of an Event of Bankruptcy, and (iv) investment earnings on any of the moneys described in clauses (i), (ii) and (iii) of this definition; and (b) if a Credit Enhancement is not in effect, “Available Moneys” means any moneys deposited with the Trustee.

**Bank** shall mean, while the 2022C Subordinated Bonds are in a Direct Purchase Index Mode, the Holder of the 2022C Subordinated Bonds, provided that there is a single Holder of all of the 2022C Subordinated Bonds and provided further that the 2022C Subordinated Bonds are not then held under the book-entry system of a Securities Depository. If there is more than one Holder of the 2022C Subordinated Bonds while the 2022C Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Holders owning a majority of the aggregate principal amount of the 2022C Subordinated Bonds then Outstanding. If the 2022C Subordinated Bonds are held under the book-entry system of a Securities Depository during any
Direct Purchase Index Mode, “Bank” means the Beneficial Owner of the 2022C Subordinated Bonds, provided that there is a single Beneficial Owner of all of the 2022C Subordinated Bonds. If there is more than one Beneficial Owner of the 2022C Subordinated Bonds while the 2022C Subordinated Bonds are in a Direct Purchase Index Mode, “Bank” means Beneficial Owners who are the beneficial owners of a majority of the aggregate principal amount of the 2022C Subordinated Bonds then Outstanding.

**Bank Purchase Date** shall mean, during any Direct Purchase Index Rate Period, (i) the date designated by the District pursuant to Section 76.11(a) and (ii) the date which is five Business Days after the date on which the Trustee receives written notice from the Bank under a Continuing Covenant Agreement which (x) advises the Trustee of the occurrence and continuance of an “Event of Default” under and as defined in such Continuing Covenant Agreement and (y) directs the Trustee to cause a mandatory tender for purchase of the 2022C Subordinated Bonds by reason of such “Event of Default.”

**Bank Rate** shall have the meaning set forth in the applicable Continuing Covenant Agreement.

**Bankruptcy Code** means Title 11 of the United States Code, as amended, and any successor statute.

**Beneficial Owner** shall mean, so long as the 2022C Subordinated Bonds are held in the Book-Entry System, any Person who acquires a beneficial ownership interest in a 2022C Subordinated Bond held by the Securities Depository. If at any time the 2022C Subordinated Bonds are not held in the Book-Entry System, Beneficial Owners shall mean Holder for purposes of the Subordinate Master Resolution.

**Bond Counsel** shall mean any firm of nationally recognized municipal bond attorneys selected by the District and experienced in the issuance of municipal bonds and matters relating to the exclusion of the interest thereon from gross income for federal income tax purposes.

**Book-Entry System** shall mean the system maintained by the Securities Depository.

**Business Day** shall mean any day other than (i) a Saturday or Sunday or (ii) a day on which banks located in (a) the State of California or the State of New York, (b) the city or cities in which the principal office of the Trustee, the Paying Agent, the Remarketing Agent, if any, the Bank, if any, or the Calculation Agent, if any, are located, or (c) the city or cities in which the office of the Credit Provider or Liquidity Provider at which it will pay draws or advances is located, are required or authorized to remain closed or (iii) a day on which The New York Stock Exchange or Federal Reserve Bank is closed.

**Calculation Agent** shall mean, (i) during any Direct Purchase Index Rate Period, the Bank or any other party appointed by the District with the consent of the Bank so long as the Bank owns a majority in aggregate principal amount of the 2022C Subordinated Bonds and (ii) during any Index Rate Period, the Trustee or any other party appointed by the District to act as calculation agent for the 2022C Subordinated Bonds.
**Call Protection Date** shall mean (i) with respect to the initial issuance of the 2022C Subordinated Bonds, if applicable, the date specified in the Sales Certificate as the Call Protection Date and (ii) with respect to any Conversion to a Term Rate Period or Index Rate Period, the date specified by the District in writing as the Call Protection Date for such Term Rate Period or Index Rate Period on or before the first day of such Term Rate Period or Index Rate Period.

**Code** shall mean the Internal Revenue Code of 1986, as amended.

**Continuing Covenant Agreement** shall mean, during any Direct Purchase Index Rate Period, any agreement between the District and the Bank which may be designated as the Continuing Covenant Agreement.

**Conversion Date** shall mean, with respect to the 2022C Subordinated Bonds in a particular Interest Rate Mode, the day on which another Interest Rate Mode for the 2022C Subordinated Bonds begins, with respect to the 2022C Subordinated Bonds in a Term Rate Mode, the day on which a new Term Rate Period begins, with respect to 2022C Subordinated Bonds in a Direct Purchase Index Mode, the day on which a new Direct Purchase Index Rate Period begins, and with respect to 2022C Subordinated Bonds in an Index Mode, the day on which a new Index Rate Period begins.

**Conversion Notice** shall mean the notice from the District to the other Notice Parties pursuant to Section 76.11(a)(i).

**Credit Enhancement** shall mean, with respect to the 2022C Subordinated Bonds, a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument issued in accordance with the terms hereof and then in effect and providing for or securing the payment of the principal of and interest on the 2022C Subordinated Bonds and, upon replacement of any such Credit Enhancement with an Alternate Credit Enhancement, the Alternate Credit Enhancement then in effect.

**Credit Provider** shall mean, with respect to the 2022C Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Credit Enhancement, if any, then in effect for the 2022C Subordinated Bonds.

**Credit Provider Failure** or **Liquidity Provider Failure** shall mean a failure of a Credit Provider or Liquidity Provider, as applicable, to pay a properly presented and strictly conforming draw or request for advance under a Credit Enhancement or Liquidity Facility, as applicable, or the filing or commencement of any bankruptcy or insolvency proceedings by or against a Credit Provider or Liquidity Provider, as applicable, or a Credit Provider or Liquidity Provider, as applicable, shall declare a moratorium on the payment of its unsecured debt obligations or shall repudiate a Credit Enhancement or Liquidity Facility, as applicable.

**Current Mode** shall have the meaning specified in Section 76.11(a).

**Daily Mode** shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at the Daily Rate.
**Daily Rate** shall mean the per annum interest rate on any 2022C Subordinated Bond in the Daily Mode determined pursuant to Section 76.06(a).

**Daily Rate Period** shall mean the period during which a 2022C Subordinated Bond in the Daily Mode shall bear a Daily Rate, which shall be from the Business Day upon which a Daily Rate is set to but not including the next succeeding Business Day.

**Default Rate** shall have the meaning assigned to such term in the Continuing Covenant Agreement.

**Delayed Remarketing Period** shall have the meaning specified in Section 78.10(b) hereof.

**Determination of Taxability** shall have the meaning assigned to such term in the Continuing Covenant Agreement.

**Direct Purchase Index** shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Market Agent.

**Direct Purchase Index Mode** shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at a Direct Purchase Index Rate.

**Direct Purchase Index Rate** shall mean the per annum interest rate on any 2022C Subordinated Bond in the Direct Purchase Index Mode determined in accordance with Section 76.09, being the Direct Purchase Index Rate, the Taxable Rate, the Default Rate or the Bank Rate, as applicable.

**Direct Purchase Index Rate Determination Date** shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Direct Purchase Index, the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

**Direct Purchase Index Rate Effective Period** shall mean, during any Direct Purchase Index Rate Period, the period from and including the first day of such Direct Purchase Index Rate Period to but excluding the next succeeding Direct Purchase Index Rate Reset Date and, thereafter, means each Direct Purchase Index Rate Reset Date to but excluding the next succeeding Direct Purchase Index Rate Reset Date.

**Direct Purchase Index Rate Period** shall mean the period from (and including) the date on which the 2022C Subordinated Bonds begin to bear interest in the Direct Purchase Index Mode to (but excluding) the earliest to occur of (i) the immediately succeeding Bank Purchase Date, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2022C Subordinated Bonds have been redeemed or defeased in full and (iv) the Maturity Date.

**Direct Purchase Index Rate Reset Date** shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Direct Purchase Index,
the date or dates specified by the District in writing on or before the first day of any Direct Purchase Index Rate Period for which such Direct Purchase Index will be in effect.

**District Purchase Account** shall mean the account by that name in the Purchase Fund created in Section 78.09.

**Electronic Means** shall mean telecopy, facsimile transmission, e-mail transmission or other similar electronic means of communication providing evidence of transmission, including a telephonic communication confirmed by any other method set forth in this definition.

**Eligible Account** shall mean an account that is either (a) maintained with a federal or state-chartered depository institution or trust company that has a Standard & Poor’s short-term debt rating of at least ‘A-2’ (or, if no short-term debt rating, a long-term debt rating of ‘BBB+’); or (b) maintained with the corporate trust department of a federal depository institution or state-chartered depository institution subject to regulations regarding fiduciary funds on deposit similar to Title 12 of the U.S. Code of Federal Regulation Section 9.10(b), which, in either case, has corporate trust powers and is acting in its fiduciary capacity. In the event that a fund or account required to be an “Eligible Account” no longer complies with the requirements listed above, the Trustee shall promptly (and, in any case, within not more than 30 calendar days) move such fund or account to another financial institution such that the Eligible Account requirements stated above will again be satisfied.

**Event of Bankruptcy** shall mean any of the following events:

(i) the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2022C Subordinated Bonds, or an “affiliate” of the District as defined in Bankruptcy Code § 101(2)) shall (a) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or the like of the District (or such other Person) or of all or any substantial part of their respective property, (b) commence a voluntary case under the Bankruptcy Code, or (c) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts; or

(ii) a proceeding or case shall be commenced, without the application or consent of the District (or any other Person obligated, as guarantor or otherwise, to make payments on the 2022C Subordinated Bonds, or an “affiliate” of the District as defined in Bankruptcy Code § 101(2)) in any court of competent jurisdiction, seeking (a) the liquidation, reorganization, dissolution, winding-up, or composition or adjustment of debts, of the District (or any such other Person), (b) the appointment of a trustee, receiver, custodian, liquidator or the like of the District (or any such other Person) or of all or any substantial part of their respective property, or (c) similar relief in respect of the District (or any such other Person) under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts.

**Event of Taxability** shall have the meaning assigned to such term in the Continuing Covenant Agreement.
Expiration Date shall mean the stated expiration date of a Credit Enhancement or a Liquidity Facility, as it may be extended from time to time as provided in the Credit Enhancement or the Liquidity Facility, or any earlier date on which a Credit Enhancement or a Liquidity Facility shall terminate at the direction of the District.

Favorable Opinion of Bond Counsel shall mean, with respect to any action the occurrence of which requires such an opinion, an Opinion of Counsel, which shall be a Bond Counsel, to the effect that such action is permitted under the Subordinate Master Resolution and will not, in and of itself, cause interest on the 2022C Subordinated Bonds to be included in gross income for purposes of federal income taxation.

Fitch shall mean Fitch, Inc., and its successors and assigns, except that if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Fitch” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

Fixed Rate shall mean the per annum interest rate on any 2022C Subordinated Bond in the Fixed Rate Mode determined pursuant to Section 76.07(b).

Fixed Rate Bond shall mean a 2022C Subordinated Bond in the Fixed Rate Mode.

Fixed Rate Mode shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at the Fixed Rate.

Fixed Rate Period shall mean the period from the Conversion Date upon which the 2022C Subordinated Bonds were converted to the Fixed Rate Mode to but not including the Maturity Date for the 2022C Subordinated Bonds.

Flexible Mode shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at Flexible Rates.

Flexible Rate shall mean the per annum interest rate on a Flexible Rate Bond determined for such Flexible Rate Bond pursuant to Section 76.05. The Flexible Rate Bonds may bear interest at different Flexible Rates.

Flexible Rate Bond shall mean a 2022C Subordinated Bond in the Flexible Mode.

Flexible Rate Period shall mean the period of from one to 270 calendar days (which period must end on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date) during which a Flexible Rate Bond shall bear interest at a Flexible Rate, as established by the Remarketing Agent pursuant to Section 76.05. The Flexible Rate Bonds may be in different Flexible Rate Periods.

Index shall mean (i) the SIFMA Index or (ii) any other index chosen by the District in consultation with the Remarketing Agent.
Index Mode shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at an Index Rate.

Index Rate shall mean the per annum interest rate on any 2022C Subordinated Bond in the Index Mode determined in accordance with Section 76.10.

Index Rate Determination Date shall mean (i) with respect to the SIFMA Index, Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Rate Effective Period shall mean, during any Index Rate Period, the period from and including the first day of such Index Rate Period through and including the day immediately preceding the next succeeding Index Rate Reset Date and, thereafter, means each Index Rate Reset Date through and including the day immediately preceding the next succeeding Index Rate Reset Date.

Index Rate Period shall mean the period from (and including) the date on which the 2022C Subordinated Bonds begin to bear interest in the Index Mode to (but excluding) the earliest to occur of (i) the Business Day immediately succeeding the last day thereof, (ii) the immediately succeeding Conversion Date, (iii) the date on which all of the 2022C Subordinated Bonds have been redeemed or defeased in full and (iv) the final Maturity Date.

Index Rate Reset Date shall mean (i) with respect to the SIFMA Index, Thursday of each week and (ii) with respect to any other Index, the date or dates specified by the District in writing on or before the first day of any Index Rate Period for which such Index will be in effect.

Index Percentage shall mean (i) with respect to the initial issuance of the 2022C Subordinated Bonds, if applicable, 100% and (ii) upon any Conversion to an Index Rate Period, the percentage of the Index determined by the Remarketing Agent in accordance with Section 76.10; provided, however, that the Index Percentage shall never be less than 65% unless a Favorable Opinion of Bond Counsel is delivered on or before the determination of the Index Percentage by the Remarketing Agent.

Index Spread shall mean (i) with respect to the initial issuance of the 2022C Subordinated Bonds and each maturity of the 2022C Subordinated Bonds, if applicable, the fixed per annum rate specified for such maturity of the 2022C Subordinated Bonds in the Sales Certificate and (ii) upon any Conversion to an Index Rate Period, the fixed per annum rate determined by the Remarketing Agent in accordance with Section 76.10.

Interest Accrual Period shall mean the period during which a 2022C Subordinated Bond accrues interest payable on the next Interest Payment Date applicable thereto. Each Interest Accrual Period for 2022C Subordinated Bonds shall be the period commencing on (and including) the last Interest Payment Date to which interest has been paid (or, if no interest has been paid in such Interest Rate Mode, commencing on (and including) the date of original authentication and delivery of the 2022C Subordinated Bonds, or the Conversion Date, as the case may be) to (and excluding) the Interest Payment Date on which interest is to be
paid. If, at the time of authentication of any 2022C Subordinated Bond, interest is in default or overdue on the 2022C Subordinated Bonds, such 2022C Subordinated Bond shall bear interest from the date to which interest has previously been paid in full or made available for payment in full on Outstanding 2022C Subordinated Bonds.

**Interest Payment Date** shall mean each date on which interest is to be paid and is: (i) with respect to Flexible Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2022C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index Mode, the first Business Day of each month; (iii) with respect to 2022C Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first such day which is at least three months after the date of initial issuance of the 2022C Subordinated Bonds or the Conversion Date to such Term Rate Mode, as applicable); (iv) (without duplication as to any Interest Payment Date listed above) any Mandatory Purchase Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date; and (vi) with respect to any Liquidity Provider Bonds, as provided in the Reimbursement Agreement.

**Interest Period** shall mean, for 2022C Subordinated Bonds in a particular Interest Rate Mode, the period of time that such 2022C Subordinated Bonds bear interest at the rate (per annum) which becomes effective at the beginning of such period, and shall include a Flexible Rate Period, a Daily Rate Period, a Weekly Rate Period, a Direct Purchase Index Rate Effective Period, an Index Rate Effective Period, a Term Rate Period and a Fixed Rate Period.

**Interest Rate Mode** shall mean, as the context may require, the Flexible Mode, the Daily Mode, the Weekly Mode, the Direct Purchase Index Mode, the Index Mode, the Term Rate Mode or the Fixed Rate Mode.

**Liquidity Facility** shall mean, with respect to the 2022C Subordinated Bonds, a letter of credit, line of credit, standby bond purchase agreement or other liquidity instrument issued in accordance with the terms hereof and then in effect and providing for the payment of the Purchase Price of Tendered Bonds and, upon replacement of such Liquidity Facility with an Alternate Liquidity Facility, the Alternate Liquidity Facility then in effect.

**Liquidity Facility Purchase Account** shall mean the account by that name in the Purchase Fund created by Section 78.09.

**Liquidity Provider** shall mean, with respect to the 2022C Subordinated Bonds, any bank, insurance company, pension fund or other financial institution which provides the Liquidity Facility, if any, then in effect for the 2022C Subordinated Bonds.

**Liquidity Provider Bonds** shall mean any 2022C Subordinated Bonds purchased by the Liquidity Provider with funds drawn on or advanced under the Liquidity Facility.

**Long-Term Mode** shall mean a Term Rate Mode or a Fixed Rate Mode.

**Mandatory Purchase Date** shall mean: (i) with respect to a Flexible Rate Bond, the first Business Day following the last day of each Flexible Rate Period with respect to such Flexible Rate Bond, (ii) with respect to 2022C Subordinated Bonds in the Term Rate Mode, the
first Business Day following the last day of each Term Rate Period applicable to such 2022C Subordinated Bonds, (iii) with respect to any 2022C Subordinated Bonds, any Conversion Date applicable to such 2022C Subordinated Bond or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 76.11 not failed to occur, (iv) with respect to any 2022C Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2022C Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility securing such 2022C Subordinated Bonds, (vi) with respect to any 2022C Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2022C Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee’s receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2022C Subordinated Bonds and in no event later than the day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2022C Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2022C Subordinated Bonds (other than interest on 2022C Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2022C Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee’s receipt of such notice, (viii) with respect to 2022C Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee’s receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2022C Subordinated Bonds, (ix) with respect to 2022C Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2022C Subordinated Bonds, and (x) with respect to 2022C Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

**Market Agent** shall mean the Person appointed by the District to serve as market agent in connection with a conversion to any Direct Purchase Index Rate Period.

**Maturity Date** shall mean the maturity date or maturity dates of the 2022C Subordinated Bonds set forth in the Sales Certificate, or, if established pursuant to Section 76.11(b)(v) upon a change to the Fixed Rate Mode, the Serial Maturity Dates.

**Maximum Rate** shall mean (i) with respect to Liquidity Provider Bonds and 2022C Subordinated Bonds in the Direct Purchase Index Mode, a rate of interest per annum not exceeding the maximum non-usurious lawful rate of interest permitted by applicable laws and (ii) with respect to all other 2022C Subordinated Bonds, a rate of interest of twelve percent (12%) per annum unless a lesser rate of interest is specified as the Maximum Rate in the Sales
Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period.

Moody’s shall mean Moody’s Investors Service and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “Moody’s” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent.

New Mode shall have the meaning specified in Section 76.11(a).

Notice Parties shall mean the Trustee, the Remarketing Agent, if any, the Paying Agent, the Credit Provider, if any, the Liquidity Provider, if any, the Bank, if any, the Market Agent, if any, and the Calculation Agent, if any.

Opinion of Counsel shall mean a written legal opinion from a firm of attorneys experienced in the matters to be covered in the opinion.

Outstanding, when used with reference to 2022C Subordinated Bonds, shall mean, as of any date, 2022C Subordinated Bonds theretofore or thereupon being authenticated and delivered under this Thirteenth Supplemental Resolution except:

(i) 2022C Subordinated Bonds cancelled by the Trustee, or delivered to the Trustee for cancellation, at or prior to such date;

(ii) 2022C Subordinated Bonds paid or deemed paid pursuant to Section 10.01 of the Subordinate Master Resolution; and

(iii) 2022C Subordinated Bonds in lieu of or in substitution for which other 2022C Subordinated Bonds shall have been authenticated and delivered pursuant to this Thirteenth Supplemental Resolution.

Person shall mean an individual, a corporation, a partnership, an association, a joint venture, a trust, an unincorporated organization or any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

Principal Payment Date shall mean any date upon which the principal amount of 2022C Subordinated Bonds is due under the Subordinate Master Resolution, including any Maturity Date, any Serial Maturity Date, any Redemption Date, or the date the maturity of any 2022C Subordinated Bond is accelerated pursuant to the terms of the Subordinate Master Resolution.

Purchase Date shall mean (i) for a 2022C Subordinated Bond in the Daily Mode or the Weekly Mode, any Business Day selected by the Beneficial Owner of said 2022C Subordinated Bond pursuant to the provisions of Section 78.01, and (ii) any Mandatory Purchase Date.

Purchase Fund shall mean the fund by that name created in Section 78.09.
**Purchase Price** shall mean an amount equal to the principal amount of any 2022C Subordinated Bonds purchased on any Purchase Date, plus accrued interest to but excluding the Purchase Date; provided, however, that (i) if the Purchase Date for any 2022C Subordinated Bond to be purchased is an Interest Payment Date for such 2022C Subordinated Bond, the Purchase Price thereof shall be the principal amount thereof, and interest on such 2022C Subordinated Bond shall be paid to the Holder of such 2022C Subordinated Bond pursuant to the Subordinate Master Resolution and this Thirteenth Supplemental Resolution and (ii) in the case of a purchase on a Conversion Date or proposed Conversion Date which is preceded by a Term Rate Period or an Index Rate Period and which occurs prior to the day originally established as the last day of such preceding Term Rate Period or Index Rate Period, the Purchase Price of any 2022C Subordinated Bond to be purchased on such Conversion Date shall be the Redemption Price which would have been applicable to such 2022C Subordinated Bond if the preceding Term Rate Period or Index Rate Period had continued to the day originally established as its last day, plus accrued interest, if any.

**Rate Determination Date** shall mean any date on which the interest rate on 2022C Subordinated Bonds shall be determined, which, (i) in the case of the Flexible Mode, shall be the first day of an Interest Period; (ii) in the case of the Daily Mode, shall be each Business Day commencing with the first day (which must be a Business Day) the 2022C Subordinated Bonds become subject to the Daily Mode; (iii) in the case of the Weekly Mode, shall be (A) each Wednesday or, if Wednesday is not a Business Day, then the Business Day next succeeding such Wednesday, and (B) not later than the Business Day preceding a Conversion Date, a Substitution Date or a Mandatory Purchase Date specified in clause (viii) of the definition of Mandatory Purchase Date; (iv) in the case of the Term Rate Mode, shall be a Business Day no later than the Business Day next preceding the first day of an Interest Period, as determined by the Remarketing Agent; (v) in the case of the Direct Purchase Index Mode, each Direct Purchase Index Rate Determination Date; (vi) in the case of the Index Mode, each Index Rate Determination Date, and (vii) in the case of the Fixed Rate Mode, shall be a date determined by the Remarketing Agent which shall be at least one Business Day prior to the Conversion Date.

**Rating Agencies** shall mean any of Moody’s, S&P or Fitch, which is then providing a rating on the 2022C Subordinated Bonds at the request of the District.

**Record Date** shall mean (i) with respect to 2022C Subordinated Bonds in a Daily Mode, Weekly Mode, Flexible Mode, Direct Purchase Index Mode or Index Mode, the last Business Day before an Interest Payment Date, and (ii) with respect to 2022C Subordinated Bonds in a Term Rate Mode or Fixed Rate Mode, the fifteenth (15th) day (whether or not a Business Day) next preceding each Interest Payment Date.

**Redemption Date** shall mean the date fixed for redemption of 2022C Subordinated Bonds subject to redemption in any notice of redemption given in accordance with the terms of the Subordinate Master Resolution.

**Redemption Price** shall mean an amount equal to the principal of and premium, if any, and accrued interest, if any, on the 2022C Subordinated Bonds to be paid on the Redemption Date.
Reimbursement Agreement shall mean any reimbursement agreement, credit agreement, line of credit agreement, standby purchase agreement or other agreement by and between a Credit Provider or Liquidity Provider, as applicable, and the District.

Remarketing Agent shall mean any investment banking firm which may be appointed with respect to the 2022C Subordinated Bonds pursuant to Section 79.01.

Remarketing Agreement shall mean any agreement relating to the 2022C Subordinated Bonds by and between the District and a Remarketing Agent, as it may be amended or supplemented from time to time in accordance with its terms.

Remarketing Proceeds Account shall mean the account by that name in the Purchase Fund created in Section 78.09.

Representations Letter shall mean the Letter of Representations from the District to the Securities Depository in connection with the 2022C Subordinated Bonds in a book-entry system, as supplemented and amended from time to time.

Sales Certificate shall mean a written certificate of the District executed by the Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District or the designee of any of them prior to the issuance of the 2022C Subordinated Bonds setting forth the principal amount, Maturity Date or Maturity Dates, initial interest rate or rates, and such other matters with respect to the 2022C Subordinated Bonds as such officer may deem appropriate, as provided in Section 76.02.

S&P shall mean S&P Global Ratings and its successors and assigns, except that if such shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, then the term “S&P” shall be deemed to refer to any other nationally recognized securities rating agency selected by the District after consultation with the Remarketing Agent, if any.

S&P Municipal Bond 7 Day High Grade Rate Index shall mean for a Rate Determination Date, the level of the “S&P Municipal Bond 7 Day High Grade Rate Index” (formerly known as the J.J. Kenny Index) maintained by Standard and Poor’s for a one-week maturity as published each day.

Securities Depository shall mean The Depository Trust Company, and such other securities depository as the District may designate in a certificate of the District delivered to the Trustee.

Serial Bonds shall mean the 2022C Subordinated Bonds maturing on the Serial Maturity Dates, as determined pursuant to Section 76.11(b).

Serial Maturity Dates shall mean the dates on which the Serial Bonds mature, as determined pursuant to Section 76.11(b).
Serial Payments shall mean the payments to be made in payment of the principal of the Serial Bonds on the Serial Maturity Dates.

Short-Term Mode shall mean the Daily Mode, the Weekly Mode or the Flexible Mode.

SIFMA Index shall mean, for any applicable Rate Determination Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by SIFMA and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day. If the SIFMA Index is no longer published, then “SIFMA Index” shall mean the S&P Municipal Bond 7 Day High Grade Rate Index. If the S&P Municipal Bond 7 Day High Grade Rate Index is no longer published, then “SIFMA Index” shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by SIFMA to determine the SIFMA Index immediately prior to the date on which SIFMA ceased publication of the SIFMA Index. Notwithstanding the foregoing, if the SIFMA Index as determined as provided above would be less than 0.0%, then the SIFMA Index will be deemed to be 0.0%.

Substitution Date shall mean the date upon which an Alternate Credit Enhancement or Alternate Liquidity Facility is scheduled to be substituted for a Credit Enhancement or Liquidity Facility then in effect.

Taxable Date shall mean the date on which interest on the 2022C Subordinated Bonds is first includable in gross income of the Holder (including, without limitation, any previous Holder) thereof as a result of an Event of Taxability as such a date is established pursuant to a Determination of Taxability.

Taxable Rate shall mean an interest rate per annum at all times equal to the product of the Direct Purchase Index Rate then in effect multiplied by the Taxable Rate Factor.

Taxable Rate Factor shall have the meaning set forth in the applicable Continuing Covenant Agreement.

Tendered Bonds shall mean 2022C Subordinated Bonds tendered for purchase by the Holders or Beneficial Owners thereof pursuant to Section 78.01 or subject to mandatory tender for purchase on a Mandatory Purchase Date pursuant to Section 78.02.

Tender Notice shall mean a notice delivered by Electronic Means or in writing with respect to a 2022C Subordinated Bond that states (i) the principal amount of such 2022C Subordinated Bond to be purchased pursuant to Section 78.01, (ii) the Purchase Date on which such 2022C Subordinated Bond is to be purchased, (iii) applicable payment instructions with respect to the 2022C Subordinated Bonds being tendered for purchase and (iv) an irrevocable demand for such purchase.
Tender Notice Deadline with respect to a 2022C Subordinated Bond shall mean:
(i) during a Daily Mode with respect to such 2022C Subordinated Bond, 11:00 a.m. on any Business Day and (ii) during a Weekly Mode with respect to such 2022C Subordinated Bond, 5:00 p.m. on a Business Day not less than seven days prior to the applicable Purchase Date.

Term Rate shall mean the per annum interest rate for 2022C Subordinated Bonds in the Term Rate Mode determined pursuant to Section 76.07(a).

Term Rate Mode shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at the Term Rate.

Term Rate Period shall mean the period from (and including) the date on which the 2022C Subordinated Bonds begin to bear interest in a Term Rate Mode to (but excluding) the commencement date of the next succeeding Interest Period, including another Term Rate Period.

2022 Tax Certificate shall mean the Tax Certificate executed and delivered by the District in connection with the issuance of the 2022C Subordinated Bonds, as amended or supplemented from time to time in accordance with its terms.

Weekly Mode shall mean the Interest Rate Mode during which the 2022C Subordinated Bonds bear interest at the Weekly Rate.

Weekly Rate shall mean the per annum interest rate on 2022C Subordinated Bonds in the Weekly Mode determined pursuant to Section 76.06(b).

Weekly Rate Period shall mean the period during which a 2022C Subordinated Bond in the Weekly Mode shall bear a Weekly Rate, which shall be the period commencing on Thursday of each week to and including Wednesday of the following week, except (i) the first Weekly Rate Period which shall be from the Conversion Date on which the Interest Rate Mode for the 2022C Subordinated Bonds is changed to a Weekly Mode to and including the Wednesday of the following week and (ii) the last Weekly Rate Period which shall end on the day preceding the earliest to occur of the Conversion Date on which the Interest Rate Mode for the 2022C Subordinated Bonds is changed from the Weekly Mode to a different Interest Rate Mode, the Maturity Date or the Mandatory Purchase Date for such 2022C Subordinated Bond.
ARTICLE LXXVI

THE 2022C SUBORDINATED BONDS

Section 76.01. Authorization and Purpose of 2022C Subordinated Bonds.
The Board hereby authorizes the issuance of a series of revenue bonds of the District in accordance with the Subordinate Master Resolution, designated as “Subordinated Electric Revenue Refunding Bonds, 2022 Series C” (the “2022C Subordinated Bonds”) for the purpose of (i) refunding the Refunded Bonds and (ii) paying costs of issuance (to the extent set forth in the Sales Certificate).

Section 76.02. Terms, Registration, Denominations, Medium, Method and Place of Payment and Dating of 2022C Subordinated Bonds.

(a) The 2022C Subordinated Bonds shall be issued in the aggregate principal amount which, together with the aggregate principal amount of the District’s Electric Revenue Refunding Bonds, 2022 Series J, if any, issued and delivered at the same time shall not exceed $170,000,000, shall bear interest at such initial rate or rates for such initial Interest Period, shall bear interest in such initial Interest Rate Mode, shall mature and become payable as to principal on such Maturity Date or Maturity Dates (not to exceed forty (40) years from the date of issuance of the 2022C Subordinated Bonds) in the amount and be subject to such mandatory sinking fund account payments on such mandatory sinking fund account payment dates, if any, all as set forth in the Sales Certificate. In addition to the provisions required pursuant to the terms of this Thirteenth Supplemental Resolution to be specified in the Sales Certificate, the Sales Certificate may contain such provisions, in a form approved by the District’s Bond Counsel and the District’s counsel, as the officer executing the Sales Certificate may deem necessary or desirable and consistent with the purpose of this Thirteenth Supplemental Resolution, including provisions (i) adding additional covenants and agreements to be observed by the District, (ii) curing, correcting, amending or supplementing any ambiguous, defective or ineffective provision contained in the Subordinate Master Resolution or this Thirteenth Supplemental Resolution, or (iii) amending or supplementing any provision contained herein to the extent necessary to provide for the issuance of the 2022C Subordinated Bonds if, in the judgment of such officer such provision is reasonable. The Chief Executive Officer and General Manager of the District, any Member of the Executive Committee of the District, the Treasurer of the District, the Secretary of the District or the Chief Financial Officer of the District, or the designee of any of them, is hereby authorized and instructed to execute and deliver the Sales Certificate and, upon execution and delivery thereof, the Sales Certificate shall be incorporated herein and in the Subordinate Master Resolution by reference. The execution and delivery of the Sales Certificate shall be conclusive evidence that, where any judgment or determination of reasonableness is required to be made by the person signing said certificate, such judgment or determination has been made.

(b) The 2022C Subordinated Bonds shall be issued in the form of fully registered 2022C Subordinated Bonds in Authorized Denominations and no provision of the Subordinate Master Resolution relating to coupon bonds or coupons shall apply to the 2022C Subordinated Bonds. 2022C Subordinated Bonds (other than 2022C Subordinated Bonds in the Direct Purchase Index Mode) shall be issued in the form of one single certificated bond in the
aggregate principal amount of the 2022C Subordinated Bonds and shall be registered as set forth in Section 80.04 of this Thirteenth Supplemental Resolution. 2022C Subordinated Bonds in the Direct Purchase Index Mode shall be issued in the form of one single certificated bond in the aggregate principal amount of the 2022C Subordinated Bonds and shall be registered in the name of the Holder thereof or as otherwise directed by such Holder. Registered ownership of the 2022C Subordinated Bonds, or any portion thereof, may not thereafter be transferred except as set forth in the Continuing Covenant Agreement (during any time that the 2022C Subordinated Bonds are in the Direct Purchase Index Mode), Section 2.05 of the Subordinate Master Resolution and Section 80.04 of this Thirteenth Supplemental Resolution. Each 2022C Subordinated Bond in the Direct Purchase Index Mode shall contain a legend indicating that the transferability of such 2022C Subordinated Bond is subject to the restrictions set forth in this Thirteenth Supplemental Resolution.

(c) The 2022C Subordinated Bonds shall be dated as of the date of their initial issuance and shall be numbered in such manner as is determined by the Trustee.

(d) The principal of and premium, if any, and interest on the 2022C Subordinated Bonds shall be payable in lawful money of the United States of America.

(e) Interest on the 2022C Subordinated Bonds shall be paid on each Interest Payment Date by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode by check mailed on the date on which due to the Holders of the 2022C Subordinated Bonds at the close of business on the Record Date for the 2022C Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2022C Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2022C Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2022C Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of $1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2022C Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2022C Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2022C Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2022C Subordinated Bonds registered in the name of the Securities Depository (or its nominee), interest on any such 2022C Subordinated Bond shall be payable only upon surrender of such 2022C Subordinated Bond at the office of the Paying Agent.

(f) The principal of and premium, if any, on each 2022C Subordinated Bond shall be payable on the Principal Payment Date of such 2022C Subordinated Bond upon surrender thereof at the office of the Paying Agent; provided that the Paying Agent may agree with the Holder of any 2022C Subordinated Bond (and hereby does so agree with the Bank during any Direct Purchase Index Rate Period) that such Holder may, in lieu of surrendering the same for a new 2022C Subordinated Bond, endorse on such 2022C Subordinated Bond a record of partial payment of the principal of such 2022C Subordinated Bond in the form set forth below (which shall be typed or printed on such 2022C Subordinated Bond):
The Paying Agent shall maintain a record of each such partial payment made in accordance with the foregoing agreement and such record of the Paying Agent shall be conclusive. Such partial payment shall be valid upon payment of the amount thereof to the Holder of such 2022C Subordinated Bond, and the District, the Trustee and the Paying Agent shall be fully released and discharged from all liability to the extent of such payment regardless of whether such endorsement shall or shall not have been made upon such 2022C Subordinated Bond by the Holder thereof and regardless of any error or omission in such endorsement.

(g) Except as may be specifically set forth herein, the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District may treat the Holder of a 2022C Subordinated Bond as the absolute owner thereof for all purposes, whether or not such 2022C Subordinated Bond shall be overdue, and the Paying Agent, the Trustee, the Remarketing Agent, if any, and the District shall not be affected by any knowledge or notice to the contrary. Payment of the principal of and premium, if any, and interest on each 2022C Subordinated Bond shall be made only to such Holder, which payments shall be valid and effectual to satisfy and discharge the liability of such 2022C Subordinated Bond to the extent of the sum or sums so paid. All 2022C Subordinated Bonds paid at maturity or on earlier redemption pursuant to the provisions of this Section shall be cancelled by the Paying Agent.

(h) Each 2022C Subordinated Bond shall bear interest at the applicable rate or rates during each applicable Interest Accrual Period until the entire Principal Amount thereof has been paid.

Section 76.03. Payment of Principal and Interest of 2022C Subordinated Bonds: Acceptance of Terms and Conditions.

(a) The interest on each 2022C Subordinated Bond shall become due and payable on the Interest Payment Dates with respect to such 2022C Subordinated Bond to and including the Maturity Date of such 2022C Subordinated Bond, and on each Redemption Date and on the date of any acceleration prior thereto. The principal of each 2022C Subordinated Bond shall become due and payable on the Principal Payment Date of such 2022C Subordinated Bond.

(b) By the acceptance of its 2022C Subordinated Bond, the Holder thereof shall be deemed to have agreed to all the terms and provisions of such 2022C Subordinated Bond as specified in such 2022C Subordinated Bond and the Subordinate Master Resolution, including without limitation the applicable Interest Periods, interest rates (including any applicable
Alternate Rate), Purchase Dates, Mandatory Purchase Dates, Purchase Prices, mandatory and optional purchase and redemption provisions applicable to such 2022C Subordinated Bond, method and timing of purchase, redemption and payment. Such Holder further agrees that if, on any date upon which its 2022C Subordinated Bond is to be purchased, redeemed or paid at maturity or earlier due date, funds are on deposit with the Paying Agent or the Trustee to pay the full amount due on such 2022C Subordinated Bond, then such Holder shall have no rights under the Subordinate Master Resolution other than to receive such full amount due with respect to such 2022C Subordinated Bond and that interest on such 2022C Subordinated Bond shall cease to accrue as of such date.

(c) While any 2022C Subordinated Bonds are Liquidity Provider Bonds, such Liquidity Provider Bonds shall bear interest and be payable at the times, in the manner and in the amounts required under the Liquidity Facility securing such 2022C Subordinated Bonds or the Reimbursement Agreement related thereto.

Section 76.04. Calculation and Payment of Interest; Change in Interest Rate Mode; Maximum Rate

(a) When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is the SIFMA Index, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Direct Purchase Index Mode or Index Mode is in effect and the Direct Purchase Index or the Index, as applicable, is an index other than the SIFMA Index, interest shall be calculated on the basis specified in writing by the District on or before the first day of the applicable Direct Purchase Index Rate Period or Index Rate Period. When a Short-Term Mode is in effect, interest shall be calculated on the basis of a 365/366-day year for the actual number of days elapsed. When a Term Rate Mode or a Fixed Rate Mode is in effect, interest shall be calculated on the basis of a 360-day year comprised of twelve 30-day months. Payment of unpaid interest accrued on each 2022C Subordinated Bond during each Interest Accrual Period shall be made on the applicable Interest Payment Date for such 2022C Subordinated Bond to the Holder of record of such 2022C Subordinated Bond on the applicable Record Date.

(b) The 2022C Subordinated Bonds in any Interest Rate Mode other than a Fixed Rate Mode may be changed to any other Interest Rate Mode at the times and in the manner hereinafter provided. Subsequent to such change in Interest Rate Mode (other than a change to a Fixed Rate Mode), the 2022C Subordinated Bonds may again be changed to a different Interest Rate Mode at the times and in the manner hereinafter provided. A Fixed Rate Mode shall be in effect until the Maturity Date, or acceleration thereof prior to the Maturity Date, and the 2022C Subordinated Bonds in a Fixed Rate Mode may not be changed to any other Interest Rate Mode.

(c) Subject to Section 76.09(b)(iii), no 2022C Subordinated Bonds shall bear interest at an interest rate higher than the Maximum Rate with respect thereto.

(d) In the absence of manifest error, the determination of interest rates (including any determination of rates in connection with a New Mode) and Interest Periods by the Remarketing Agent or the Calculation Agent, as applicable, as provided herein, and the record of interest rates maintained by the Paying Agent shall be conclusive and binding upon the
Remarketing Agent, the Paying Agent, the Trustee, the District, the Holders and the Beneficial Owners.

Section 76.05. Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days, ending on either a day which immediately precedes a Business Day or the day immediately preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with respect to Interest Periods, subject to limitations imposed by the second preceding sentence and in Section 76.04 hereof, on each Rate Determination Date for a Flexible Rate Bond, the Remarketing Agent shall select for such 2022C Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2022C Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2022C Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2022C Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2022C Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.
Section 76.06. **Determination of Interest Rates During the Daily Mode and the Weekly Mode.** The interest rate for 2022C Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2022C Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period. In making any such determination the Remarketing Agent shall not take into account the per annum rate of interest that would be applicable to Liquidity Provider Bonds pursuant to the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

(a) During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

(b) During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Section 76.07. **Determination of Term Rates and Fixed Rates.**

(a) **Term Rates.** The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. The Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2022C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected, and the Call Protection Date specified, by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.
(b) **Fixed Rates.** The Remarketing Agent shall determine the Fixed Rate for 2022C Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2022C Subordinated Bonds will have Serial Maturity Dates in accordance with Section 76.11(b)(v)). Except as set forth in Section 76.11(b)(v), the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2022C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 76.11(b)(v), the Fixed Rate so established shall remain in effect until the Maturity Date of such 2022C Subordinated Bonds.

Section 76.08. Alternate Rates. The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2022C Subordinated Bonds (other than 2022C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2022C Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2022C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2022C Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2022C Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2022C Subordinated Bonds.

(a) For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2022C Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

(b) For 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2022C Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.
Section 76.09. Determination of Direct Purchase Index Rates

(a) During each Direct Purchase Index Rate Period, the 2022C Subordinated Bonds shall, subject to subsection (b) of this Section 76.09, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2022C Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2022C Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2022C Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2022C Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) Adjustments to Direct Purchase Index Rates.

(i) Taxable Rate. Notwithstanding anything in the Subordinate Master Resolution or this Thirteenth Supplemental Resolution to the contrary, including, without limitation, Section 78.02(b), but subject to Section 76.04(c) and Section 76.09(b)(ii) and (iii), from and after any Taxable Date, the interest rate on 2022C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) Default Rate. Notwithstanding anything in the Subordinate Master Resolution or this Thirteenth Supplemental Resolution to the contrary, including, without limitation, Section 78.02(b), but subject to Section 76.04(c) and Section 76.09(b)(iii), from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2022C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2022C
Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Master Resolution or this Thirteenth Supplemental Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2022C Subordinated Bonds exceeds the Maximum Rate for such 2022C Subordinated Bonds, then (A) such 2022C Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2022C Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2022C Subordinated Bonds as calculated pursuant to this Section 76.09 and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2022C Subordinated Bonds as calculated pursuant to this Section 76.09 is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2022C Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2022C Subordinated Bonds are redeemed or tendered for purchase in accordance with this Thirteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2022C Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything herein to the contrary, but subject to Section 76.04(c) and Section 76.09(b)(i), (ii) and (iii) during any Amortization Period, the 2022C Subordinated Bonds shall bear interest at the Bank Rate.

Section 76.10. Determination of Index Rates. During each Index Rate Period, the 2022C Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2022C Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2022C Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2022C Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2022C Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2022C Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2022C Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2022C Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the Corporation shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2022C Subordinated Bonds at a price (without regard to accrued interest) equal to principal amount thereof on the Conversion Date for such Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in determining the Index Rate on each Index Rate Determination Date during such Index Rate Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All
dollar amounts used in or resulting from the calculation of the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward. The Calculation Agent shall make each Index Rate available by telephone or Electronic Means after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on such 2022C Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required hereunder.

Section 76.11. Changes in Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. Subject to the provisions of this Section, the District may effect a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period with respect to the 2022C Subordinated Bonds by following the procedures set forth in this Section.

(a) Changes to Interest Rate Modes Other Than Fixed Rate Mode; Changes in Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period. The Interest Rate Mode for the 2022C Subordinated Bonds (other than the 2022C Subordinated Bonds in the Fixed Rate Mode) may be changed from one Interest Rate Mode to another Interest Rate Mode (other than the Fixed Rate Mode) and the Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period for the 2022C Subordinated Bonds may be changed, as follows:

(i) Notice to Notice Parties; Notice to Holders. No later than a Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2022C Subordinated Bonds preceding the proposed Conversion Date, the District shall give written notice to the Notice Parties of its intention to effect a change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period from the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period then prevailing (for purposes of this Section, the “Current Mode”) to another Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period (for purposes of this Section, the “New Mode”) specified in such written notice. Notice of the proposed change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be given by the Trustee by mail to the Holders of the 2022C Subordinated Bonds not less than the 10th day next preceding the proposed Conversion Date, provided that no notice need be given for a Conversion Date occurring on the Business Day following the last day of a Flexible Rate Period, an Index Rate Period or a Term Rate Period or on a Substitution Date. Such notice shall state: (1) the proposed Conversion Date; (2) that the 2022C Subordinated Bonds will be subject to mandatory tender for purchase on the proposed Conversion Date (regardless of whether all of the conditions to the change in the Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period are satisfied); and (3) the Purchase Price of the 2022C Subordinated Bonds and the place of delivery for purchase of the 2022C Subordinated Bonds; provided that, if the proposed change is from one Direct Purchase Index Rate Period to a new Direct Purchase Index Rate Period and any Holder of the 2022C Subordinated Bonds shall continue to be a Holder of 2022C Subordinated Bonds.
in the new Direct Purchase Index Rate Period, the Holder may elect to retain its 2022C Subordinated Bonds by filing with the District and the Trustee not less than five days prior to the proposed Conversion Date a written notice identifying such 2022C Subordinated Bonds and the principal amount it wishes to retain.

(ii) Determination of Interest Rates. The New Mode shall commence on the Conversion Date and the interest rate(s) (together, in the case of a change to the Flexible Mode, with the Interest Period(s)) shall be determined in the manner provided in Sections 76.05, 76.06, 76.07, 76.09 and 76.10, as applicable.

(iii) Conditions Precedent.

(1) The Conversion Date shall be:

(A) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2022C Subordinated Bonds end;

(B) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(C) in the case of a change from the Term Rate Mode to another Interest Rate Mode, or from one Term Rate Period to a new Term Rate Period, any day on which the applicable 2022C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(D) in the case of a change from the Index Mode to another Interest Rate Mode, or from one Index Rate Period to a new Index Rate Period, any day on which the applicable 2022C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(E) in the case of a change from the Direct Purchase Index Mode or from one Direct Purchase Index Rate Period to another Direct Purchase Index Rate Period, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.

(2) If the 2022C Subordinated Bonds to be converted are Flexible Rate Bonds, no Interest Period with respect to such 2022C Subordinated Bonds set after delivery by the District to the Remarketing Agent of the notice of the intention to effect a change in Interest Rate Mode shall extend beyond the proposed Conversion Date.

(3) The following items shall have been delivered to the District and the Trustee on or prior to the Conversion Date:
(A) a Favorable Opinion of Bond Counsel dated the Conversion Date; and

(B) if there is to be a Liquidity Facility or an Alternate Liquidity Facility or Credit Enhancement or an Alternate Credit Enhancement delivered in connection with such change, the items required by Section 78.08(d).

(4) If no Liquidity Facility is in effect to provide funds for the purchase of 2022C Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 78.04 shall not be less than the amount required to purchase all of the 2022C Subordinated Bonds on the Conversion Date at the Purchase Price.

(b) Change to Fixed Rate Mode. At the option of the District, the Interest Rate Mode for the 2022C Subordinated Bonds may be changed to the Fixed Rate Mode as provided in this Section 76.11(b). On any Business Day which is at least two Business Days prior to the date on which the Trustee is required to notify the Holders of the 2022C Subordinated Bonds before the proposed Conversion Date pursuant to clause (ii) of this subsection (b), the District shall give written notice to the Notice Parties stating that the Interest Rate Mode will be changed to the Fixed Rate Mode and setting forth the proposed Conversion Date. In addition, such notice shall state whether some or all of the 2022C Subordinated Bonds to be converted shall be converted to Serial Bonds and, if so, the applicable Serial Maturity Dates and Serial Payments, all as determined pursuant to clause (v) of this subsection (b). Any such change in Interest Rate Mode shall be made as follows:

(i) Conversion Date. The Conversion Date shall be:

(1) in the case of a change from the Flexible Mode, the Business Day next succeeding the date on which all Flexible Rate Periods determined for the 2022C Subordinated Bonds end;

(2) in the case of a change from the Daily Mode or the Weekly Mode, any Business Day;

(3) in the case of a change from the Term Rate Mode, any day on which the applicable 2022C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Term Rate Period;

(4) in the case of a change from the Index Mode, any day on which the applicable 2022C Subordinated Bonds would be subject to optional redemption if the conversion did not occur or the day immediately following the last day of the current Index Rate Period; and

(5) in the case of a change from the Direct Purchase Index Mode, any Business Day, subject to any limitations, conditions or requirements set forth in the Continuing Covenant Agreement.
(ii) Notice to Holders. Not less than the 10th day next preceding the Conversion Date, the Trustee shall mail, in the name of the District, a notice of such proposed change to the Holders of the 2022C Subordinated Bonds stating that the Interest Rate Mode will be changed to the Fixed Rate Mode, the proposed Conversion Date and that such Holder is required to tender such Holder’s 2022C Subordinated Bonds for purchase on such proposed Conversion Date.

(iii) General Provisions Applying to Change to Fixed Rate Mode. The change to the Fixed Rate Mode shall not occur unless the following items shall have been delivered to the District and the Trustee and the following conditions shall have been satisfied, in each case on or prior to the Conversion Date:

1. a Favorable Opinion of Bond Counsel dated the Conversion Date;
2. if there is to be Credit Enhancement or Alternate Credit Enhancement delivered in connection with such change, the items required by Section 78.08(d) in connection with the delivery of Credit Enhancement or Alternate Credit Enhancement; and
3. if no Liquidity Facility is in effect to provide funds for the purchase of 2022C Subordinated Bonds on the Conversion Date, the remarketing proceeds available on the Conversion Date and the amounts required to be paid by the District pursuant to Section 78.04 shall not be less than the amount required to purchase all of the 2022C Subordinated Bonds on the Conversion Date at the Purchase Price.

(iv) Determination of Interest Rate. The Fixed Rate (or Fixed Rates in the case of Serial Bonds) for the 2022C Subordinated Bonds to be converted to the Fixed Rate Mode shall be established by the Remarketing Agent on the Rate Determination Date applicable thereto pursuant to the provisions of Section 76.07(b). Such Fixed Rate or Fixed Rates shall remain in effect until the Maturity Date or Serial Maturity Dates, as applicable, of such 2022C Subordinated Bonds. Such determination shall be conclusive and binding upon the District, the Trustee, the Credit Provider, if any, and the Holders of the 2022C Subordinated Bonds to which such rate will be applicable. Not later than 5:00 p.m. on the date of determination of the Fixed Rate, the Remarketing Agent shall notify the District, the Trustee and the Credit Provider, if any, of such rate by telephone.

(v) Serialization and Sinking Fund Account Redemption; Price. Upon conversion of the 2022C Subordinated Bonds to the Fixed Rate Mode, the 2022C Subordinated Bonds shall be remarketed at par, shall mature on the same Maturity Date and be subject to the same mandatory sinking fund account redemption, if any, and optional redemption provisions as set forth in this Thirteenth Supplemental Resolution prior to the Conversion; provided, however, that if the District shall deliver to the Trustee a Favorable Opinion of Bond Counsel, the District may elect to (1) have some of the 2022C Subordinated Bonds be Serial Bonds and some subject to mandatory sinking fund account redemption even if such 2022C Subordinated Bonds were not Serial Bonds or subject to mandatory sinking fund account redemption prior to such change, (2) change the optional redemption dates and/or premiums set forth in Section 77.03(b), and/or (3) sell some or all of the 2022C Subordinated Bonds at a premium or a discount to par.
(c) Failure to Satisfy Conditions Precedent to an Interest Rate Mode Change. In the event the conditions described above in subsections (a) or (b), as applicable, of this Section have not been satisfied by the applicable Conversion Date, then the New Mode shall not take effect (although any mandatory tender shall be made on such date if notice has been sent to the Holders stating that such 2022C Subordinated Bonds would be subject to mandatory purchase on such date). If the failed change in Interest Rate Mode was from the Flexible Mode, such 2022C Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the failed Conversion Date in accordance with Section 76.05. If the failed change in Interest Rate Mode was from the Daily Mode, such 2022C Subordinated Bonds shall remain in the Daily Mode, and if the failed change in Interest Rate Mode was from the Weekly Mode, such 2022C Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in accordance with the applicable provisions of Section 76.06 on and as of the failed Conversion Date. If the failed change in Interest Rate Mode was from the Term Rate Mode, then such 2022C Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 76.07. If the failed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2022C Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 76.09. If the failed change in Interest Rate Mode was from the Index Mode, then the 2022C Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 76.10.

(d) Rescission of Election. Notwithstanding anything herein to the contrary, the District may rescind any election by it to change an Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period as described above prior to the Conversion Date by giving written notice thereof to the Notice Parties prior to 10:00 a.m. on the Business Day preceding such Conversion Date. If the Trustee receives notice of such rescission prior to the time the Trustee has given notice to the Holders of the 2022C Subordinated Bonds, then such notice of change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period shall be of no force and effect. If the Trustee receives notice from the District of rescission of a change in Interest Rate Mode, Term Rate Period, Index Rate Period or Direct Purchase Index Rate Period after the Trustee has given notice thereof to the Holders of the 2022C Subordinated Bonds, then, if the proposed Conversion Date would have been a Mandatory Purchase Date, such date shall continue to be a Mandatory Purchase Date and the Interest Rate Mode for the 2022C Subordinated Bonds shall be determined as set forth in the remainder of this paragraph. If the proposed change in Interest Rate Mode was from the Flexible Mode, such 2022C Subordinated Bonds shall remain in the Flexible Mode with interest rates and Interest Periods to be established by the Remarketing Agent on the proposed Conversion Date in accordance with Section 76.05. If the proposed change in Interest Rate Mode was from the Daily Mode, such 2022C Subordinated Bonds shall remain in the Daily Mode, and if the proposed change in Interest Rate Mode was from the Weekly Mode, such 2022C Subordinated Bonds shall remain in the Weekly Mode, in each case with interest rates established in accordance with the applicable provisions of Section 76.06 on and as of the proposed Conversion Date. If the proposed change in Interest Rate Mode was from the Term Rate Mode, then such 2022C Subordinated Bonds shall remain in the Term Rate Mode with interest rates established in accordance with the applicable provisions of Section 76.07. If the proposed change in Interest Rate Mode was from the Direct Purchase Index Mode, then the 2022C Subordinated Bonds shall remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 76.09.
remain in the Direct Purchase Index Mode, with interest rates established in accordance with the applicable provisions of Section 76.09. If the proposed change in Interest Rate Mode was from the Index Mode, then the 2022C Subordinated Bonds shall remain in the Index Mode, with interest rates established in accordance with the applicable provisions of Section 76.10.

ARTICLE LXXVII

REDEMPTION OF 2022C SUBORDINATED BONDS

Section 77.01. Optional Redemption of Flexible Rate Bonds. 2022C Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2022C Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Section 77.02. Optional Redemption of 2022C Subordinated Bonds in the Daily Mode and the Weekly Mode. 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2022C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 77.03. Optional Redemption of 2022C Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

(a) 2022C Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2022C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2022C Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2022C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(b) 2022C Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2022C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

(c) The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2022C Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.
(d) Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2022C Subordinated Bonds in a Long-Term Mode is subject to the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Section 77.04. Optional and Mandatory Redemption of 2022C Subordinated Bonds in the Direct Purchase Index Mode.

(a) Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2022C Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2022C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

(b) 2022C Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Section 77.05. Mandatory Sinking Fund Account Redemption of 2022C Subordinated Bonds and Redemption of Liquidity Provider Bonds.

(a) The 2022C Subordinated Bonds shall be subject to redemption prior to maturity from mandatory sinking fund account payments for the 2022C Subordinated Bonds on the dates, if any, specified in the Sales Certificate, at a Redemption Price equal to the principal amount of the 2022C Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The mandatory sinking fund account payments for the 2022C Subordinated Bonds shall be in the amounts and payable on the dates set forth in the Sales Certificate.

(b) Liquidity Provider Bonds are subject to redemption in accordance with the terms of the applicable Liquidity Facility or related Reimbursement Agreement.

Section 77.06. Funds for Redemption of 2022C Subordinated Bonds. Unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2022C Subordinated Bonds, the Redemption Price of 2022C Subordinated Bonds (other than Liquidity Provider Bonds) shall be paid solely from (1) moneys obtained from a drawing on the Credit Enhancement securing the 2022C Subordinated Bonds pursuant to Section 78.08(a) or (2) Available Moneys.

Section 77.07. Selection of 2022C Subordinated Bonds for Redemption. Whenever provision is made for the redemption of less than all of the 2022C Subordinated Bonds of any one maturity, the Trustee shall select the 2022C Subordinated Bonds to be
redeemed, from the Outstanding 2022C Subordinated Bonds of such maturity not previously called for redemption, by lot in any manner which the Trustee deems fair; provided, however, that Liquidity Provider Bonds shall be redeemed prior to the redemption of other 2022C Subordinated Bonds; provided further, however, that during a Direct Purchase Index Rate Period, the 2022C Subordinated Bonds shall be redeemed pro rata. The Trustee shall promptly notify the District in writing of the numbers of the 2022C Subordinated Bonds so selected for redemption.

Section 77.08. Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2022C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2022C Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2022C Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2022C Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2022C Subordinated Bonds to be redeemed, and shall also state that the interest on the 2022C Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2022C Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2022C Subordinated Bonds to be redeemed.

Notice of optional redemption shall be given by the Trustee for and on behalf of the District, at the written request of the District (which request shall be given to the Trustee (unless waived by the Trustee) at least twenty-five (25) days prior to the date fixed for redemption or such shorter period as is acceptable to the Trustee). Any notice of optional redemption may be rescinded by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2022C Subordinated Bonds redeemed on a Mandatory Purchase Date.

Section 77.09. Partial Redemption of 2022C Subordinated Bond. Upon surrender of any 2022C Subordinated Bond redeemed in part only, the District shall execute and the Trustee shall deliver to the registered owner thereof, at the expense of the District, a new 2022C Subordinated Bond or Bonds, of the same maturity, of Authorized Denominations in aggregate principal amount equal to the unredeemed portion of the 2022C Subordinated Bond surrendered.

Section 77.10. Effect of Redemption. Notice of redemption having been duly given as aforesaid, and moneys for payment of the Redemption Price being held by the Trustee, the 2022C Subordinated Bonds so to be redeemed shall, on the date designated in such notice, become due and payable at the Redemption Price specified in such notice; and from and after the
date so designated interest on the 2022C Subordinated Bonds so designated for redemption shall cease to accrue and the Holders and Beneficial Owners of said 2022C Subordinated Bonds shall have no rights in respect thereof, except to receive payment of the Redemption Price thereof.

Section 77.11. Disposition of Redeemed 2022C Subordinated Bonds. All 2022C Subordinated Bonds redeemed pursuant to the provisions of this Article LXXVII shall be delivered to and cancelled by the Trustee and shall thereafter be delivered by the Trustee to, or upon the order of, the District, and no 2022C Subordinated Bonds shall be issued in place thereof.

ARTICLE LXXVIII

PURCHASE OF 2022C SUBORDINATED BONDS

Section 78.01. Optional Tenders of 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode. Subject to Section 78.06, the Beneficial Owners of 2022C Subordinated Bonds in a Daily Mode or a Weekly Mode may elect to have their 2022C Subordinated Bonds (or portions of those 2022C Subordinated Bonds, provided that no 2022C Subordinated Bonds remain Outstanding in other than Authorized Denominations) purchased on any Business Day at a price equal to the Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline. Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent and provide the Remarketing Agent with a copy of such Tender Notice.

Section 78.02. Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct Purchase Index Mode:

(a) The 2022C Subordinated Bonds shall be subject to mandatory purchase on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by mail to the Holders of the 2022C Subordinated Bonds subject to mandatory purchase no less than ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and (x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date (provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2022C Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the Mandatory Purchase Date. The failure to mail such notice with respect to any 2022C Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2022C Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be conclusively presumed to have been given, whether or not actually received by any Holder or Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

(b) Notwithstanding subparagraph (a) above and anything to the contrary in this Thirteenth Supplemental Resolution, in the event the 2022C Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the
conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2022C Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2022C Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing, in which case the 2022C Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2022C Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2022C Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2022C Subordinated Bonds may be subject to optional redemption or purchase at the sole option of the District at any time with notice as and to the extent provided in the Continuing Covenant Agreement.

Section 78.03. Remarketing of 2022C Subordinated Bonds; Notices.

(a) Remarketing of 2022C Subordinated Bonds. The Remarketing Agent shall use its best efforts pursuant to the terms and conditions of the Remarketing Agreement to offer for sale:

(i) all 2022C Subordinated Bonds or portions thereof as to which a Tender Notice has been delivered pursuant to Section 78.01; and

(ii) all 2022C Subordinated Bonds required to be purchased on a Mandatory Purchase Date described in clauses (i), (ii), (iii), (iv), (viii) or (ix) of the definition thereof; and

(iii) any Liquidity Provider Bonds (A) purchased on a Purchase Date described in clause (i) or (ii) above, (B) with respect to which the Liquidity Provider has provided notice to the Trustee and the Remarketing Agent that it has reinstated the Available Amount, (C) with respect to which an Alternate Liquidity Facility and Alternate Credit Enhancement is in effect (if such funds were secured by a Credit Enhancement prior to becoming Liquidity Provider Bonds, which Credit Enhancement is no longer in effect), or (D) which are being marketed as Fixed Rate Bonds.

The Remarketing Agent shall not remarket 2022C Subordinated Bonds to the District or any affiliate thereof. In connection with the remarketing of any 2022C Subordinated Bonds with respect to which notice of redemption or notice of mandatory purchase has been given, the Remarketing Agent shall notify each person to which such 2022C Subordinated Bonds are remarketed of such notice of redemption or notice of mandatory purchase.

Anything in this Thirteenth Supplemental Resolution to the contrary notwithstanding, if there shall have occurred and be continuing either a Credit Provider Failure or a Liquidity Provider Failure with respect to a Series of 2022C Subordinated Bonds, the Remarketing Agent shall not remarket such 2022C Subordinated Bonds. All other provisions of
this Thirteenth Supplemental Resolution, including without limitation, those relating to the setting of interest rates and Interest Periods and mandatory and optional purchases, shall remain in full force and effect during the continuance of such Credit Provider Failure or Liquidity Provider Failure.

(b) Notice of Remarketing; Registration Instructions; New Bonds. On each date on which a 2022C Subordinated Bond is to be purchased pursuant to this Article LXXVIII:

(i) the Remarketing Agent shall notify the Trustee by Electronic Means by 11:30 a.m. if it has been unable to remarket any tendered 2022C Subordinated Bonds, and shall include in such notice the principal amount of 2022C Subordinated Bonds it has been unable to remarket;

(ii) the Remarketing Agent shall notify the Trustee by Electronic Means not later than 1:00 p.m. of the names of the purchasers of the successfully remarked 2022C Subordinated Bonds and such information as may be necessary to register the 2022C Subordinated Bonds and the registration instructions with respect thereto;

(iii) the Remarketing Agent shall cause the proceeds of the remarketing by such Remarketing Agent of tendered 2022C Subordinated Bonds to be paid to the Trustee in immediately available funds not later than 12:00 noon on the Purchase Date for such 2022C Subordinated Bonds; and

(iv) if the 2022C Subordinated Bonds are not in the Book-Entry System, the Trustee shall authenticate new 2022C Subordinated Bonds for the respective purchasers thereof which shall be available for pick-up by the Remarketing Agent not later than 2:30 p.m.

(c) Draw on Liquidity Facility or Request for Funds. On each date on which a 2022C Subordinated Bond is to be purchased pursuant to this Article LXXVIII, if (i) the Remarketing Agent shall have given notice to the Trustee pursuant to clause (b)(i) above that it has been unable to remarket any of the 2022C Subordinated Bonds or (ii) the Trustee has not received from the Remarketing Agent an amount sufficient to pay the Purchase Price of tendered Bonds, by 12:00 noon on the Purchase Date, then the Trustee shall draw on the applicable Liquidity Facility (or if no Liquidity Facility, request funds from the District) by 12:15 p.m. in an amount equal to the Purchase Price of all such 2022C Subordinated Bonds which have not been successfully remarked, requesting payment not later than 2:45 p.m. on the Purchase Date. Subject to Section 78.04, if a Liquidity Facility is in effect, the Trustee shall also give the District notice by 2:45 p.m. on the Purchase Date if it does not have funds in the Remarketing Proceeds Account and the Liquidity Facility Purchase Account sufficient to pay the Purchase Price of 2022C Subordinated Bonds tendered on such Purchase Date. Any draw on a Liquidity Facility to be made on a Substitution Date shall be on the Liquidity Facility being replaced.

Section 78.04. Source of Funds for Purchase of 2022C Subordinated Bonds. By 3:00 p.m. on the date on which a 2022C Subordinated Bond is to be purchased pursuant to this Article LXXVIII, and except as set forth in Section 78.06(b)(ii), the Trustee shall purchase
tendered 2022C Subordinated Bonds from the tendering Holders at the applicable Purchase Price
by wire transfer in immediately available funds. Funds for the payment of such Purchase Price
shall be derived solely from the following sources in the order of priority indicated and neither
the Trustee nor the Remarketing Agent shall be obligated to provide funds from any other
source:

(a) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2022C Subordinated Bonds;

(b) immediately available funds on deposit in the Liquidity Facility Purchase Account established for the 2022C Subordinated Bonds; and

(c) moneys of the District on deposit in the District Purchase Account established for the 2022C Subordinated Bonds.

If no Liquidity Facility is in effect with respect to the 2022C Subordinated Bonds, then the District shall be obligated to deposit amounts into the District Purchase Account established for the 2022C Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2022C Subordinated Bonds are insufficient therefor. If a Liquidity Facility is in effect with respect to the 2022C Subordinated Bonds, then the District may, but shall not be obligated to, deposit amounts into the District Purchase Account established for the 2022C Subordinated Bonds sufficient to pay the Purchase Price to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2022C Subordinated Bonds and the Liquidity Facility Purchase Account established for the 2022C Subordinated Bonds are insufficient therefor. If so specified in the Sales Certificate with respect to the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period, the failure of the District to deposit amounts into the District Purchase Account when the District is obligated to deposit such amounts under this Section 78.04 shall constitute an “event of default” under Section 9.01 of the Subordinate Master Resolution.

Section 78.05. Delivery of Subordinated Bonds. On each date on which a 2022C Subordinated Bond is to be purchased pursuant to this Article LXXVIII, such 2022C Subordinated Bond shall be delivered as follows:

(a) 2022C Subordinated Bonds sold by the Remarketing Agent and described in Section 78.04(a) shall be delivered by the Remarketing Agent to the purchasers of such 2022C Subordinated Bonds by 3:00 p.m.;

(b) 2022C Subordinated Bonds purchased by the Trustee with moneys described in Section 78.04(b) shall be registered immediately in the name of the Liquidity Provider or its nominee (which may be the Securities Depository) or as otherwise specified in writing by the Liquidity Provider and held as specified in writing by the Liquidity Provider, in either case on or before 3:00 p.m.; and

(c) 2022C Subordinated Bonds purchased by the District with moneys described in Section 78.04(c) shall be registered immediately in the name of the District or its nominee on or before 3:00 p.m. 2022C Subordinated Bonds so owned by the District shall
continue to be Outstanding under the terms of the Subordinate Master Resolution and be subject to all of the terms and conditions of the Subordinate Master Resolution and shall be subject to remarketing by the Remarketing Agent.

When any Liquidity Provider Bonds are remarketed, the Trustee shall not release 2022C Subordinated Bonds so remarketed to the Remarketing Agent until the Trustee has received confirmation that the Liquidity Facility has been reinstated.

Section 78.06. Book-Entry Tenders.

(a) Notwithstanding any other provision of this Article LXXVIII to the contrary, all tenders for purchase during any period in which the 2022C Subordinated Bonds are registered in the name of any Securities Depository or its nominee shall be subject to the terms and conditions set forth in the Representations Letter and to any regulations promulgated by the Securities Depository. During any period that the 2022C Subordinated Bonds are registered in the name of DTC or its nominee, the tender option rights of holders of 2022C Subordinated Bonds may be exercised only by a Direct Participant of DTC acting, directly or indirectly, on behalf of a Beneficial Owner of 2022C Subordinated Bonds by giving notice of its election to tender 2022C Subordinated Bonds or portions thereof at the times and in the manner described above. Beneficial Owners will not have any rights to tender 2022C Subordinated Bonds directly to the Trustee. Procedures under which a Beneficial Owner may direct a Direct Participant or DTC, or an Indirect Participant of DTC acting through a Director Participant of DTC, to exercise a tender option right in respect of 2022C Subordinated Bonds or portions thereof in an amount equal to all or a portion of such Beneficial Owner’s beneficial ownership interest therein shall be governed by standing instructions and customary practices determined by such Direct Participant or Indirect Participant. During any period that the 2022C Subordinated Bonds are registered in the name of DTC or its nominee, delivery of 2022C Subordinated Bonds required to be tendered for purchase shall be effected by the transfer by a Direct Participant on the applicable Purchase Date of a book-entry credit to the account of the Trustee of a beneficial ownership interest in such 2022C Subordinated Bonds.

(b) Notwithstanding anything expressed or implied herein to the contrary, during any period that a Book-Entry System for the 2022C Subordinated Bonds is maintained by the District:

(i) there shall be no requirement of physical delivery to or by the Trustee or the Remarketing Agent of:

(1) any 2022C Subordinated Bonds subject to mandatory or optional purchase as a condition to the payment of the Purchase Price therefor;

(2) any 2022C Subordinated Bonds that have become Liquidity Provider Bonds; or

(3) any remarketing proceeds of such 2022C Subordinated Bonds or Liquidity Provider Bonds; and
(ii) except as provided in (iii) below, neither the Trustee nor the Paying Agent shall have any responsibility for paying the Purchase Price of any tendered 2022C Subordinated Bond or for remitting remarketing proceeds to any Person; and

(iii) the Trustee’s sole responsibilities in connection with the purchase and remarketing of a tendered 2022C Subordinated Bond shall be to:

1. draw upon the Liquidity Facility to pay the Purchase Price of 2022C Subordinated Bond in the manner provided herein and to remit the amount so drawn to or upon the order of the Securities Depository for the benefit of the tendering Beneficial Owners; and

2. remit any proceeds derived from the remarketing of a Liquidity Provider Bond and any unused proceeds from a drawing on the Liquidity Facility to the Liquidity Provider.

Section 78.07. No Book-Entry System. During any period that the 2022C Subordinated Bonds shall not be in a Book-Entry System, the following procedures shall be followed:

(a) 2022C Subordinated Bonds shall be delivered (with all necessary endorsements) at or before 12:00 noon on the Purchase Date at the office of the Paying Agent in New York, New York; provided, however, that payment of the Purchase Price shall be made pursuant to this Section only if the 2022C Subordinated Bond so delivered to the Paying Agent conforms in all respects to the description thereof in the notice described in this Section. Payment of the Purchase Price with respect to purchases under this Section shall be made to the Holders of tendered 2022C Subordinated Bonds by wire transfer in immediately available funds by the Paying Agent by 3:00 p.m. on the Purchase Date.

(b) If a 2022C Subordinated Bond to be purchased pursuant to this Article LXXVIII is not delivered by the Holder to the Paying Agent by 12:00 noon on the date in which such 2022C Subordinated Bond is to be purchased, the Paying Agent shall hold any funds received for the purchase of those 2022C Subordinated Bonds in trust in a separate account and shall pay such funds to the former Holders of the 2022C Subordinated Bonds upon presentation of the 2022C Subordinated Bonds. Such undelivered 2022C Subordinated Bonds shall cease to accrue interest as to the former Holders on such purchase date and moneys representing the Purchase Price shall be available against delivery of those 2022C Subordinated Bonds at the Principal Office of the Paying Agent; provided, however, that any funds which shall be so held by the Paying Agent and which remain unclaimed by the former Holder of a 2022C Subordinated Bond not presented for purchase for a period of two years after delivery of such funds to the Paying Agent, shall, to the extent permitted by law, upon request in writing by the District and the furnishing of security or indemnity to the Paying Agent’s satisfaction, be paid to the District free of any trust or lien and thereafter the former Holder of such 2022C Subordinated Bond shall look only to the District and then only to the extent of the amounts so received by the District without any interest thereon and the Paying Agent shall have no further responsibility with respect to such moneys or payment of the Purchase Price of such 2022C Subordinated Bonds. The Paying Agent shall authenticate a replacement 2022C Subordinated Bond for any
undelivered 2022C Subordinated Bond which may then be remarketed by the Remarketing Agent.

(c) The Paying Agent shall hold all 2022C Subordinated Bonds properly tendered to it for purchase hereunder as agent and bailee of, and in escrow for the benefit of, the respective Holders of the 2022C Subordinated Bonds which shall have so tendered such 2022C Subordinated Bonds until moneys representing the Purchase Price of such 2022C Subordinated Bonds shall have been delivered to or for the account of or to the order of such Holders.

Section 78.08. Credit Enhancement and Liquidity Facility

(a) While a Credit Enhancement is in effect with respect to the 2022C Subordinated Bonds, the Trustee shall, on the Business Day preceding each Interest Payment Date and Principal Payment Date draw on the Credit Enhancement in accordance with the terms thereof so as to receive thereunder with respect to the 2022C Subordinated Bonds secured by the Credit Enhancement by 1:00 p.m. on said Interest Payment Date and Principal Payment Date, an amount, in immediately available funds, equal to the amount of interest and principal payable on such 2022C Subordinated Bonds on such Interest Payment Date and Principal Payment Date. The proceeds of such draws shall be deposited in a separate account in the Subordinated Bond Interest and Principal Fund and shall be applied to pay principal of and interest on such 2022C Subordinated Bonds prior to the application of any other funds held by the Trustee therefor. Amounts held in such account shall be held uninvested and separate and apart from all other funds and accounts. Such accounts shall at all times be Eligible Accounts.

(b) If a Liquidity Facility is in effect with respect to the 2022C Subordinated Bonds, on each date on which a 2022C Subordinated Bond is to be purchased, the Trustee, by demand given by Electronic Means by 12:15 p.m., shall draw on the Liquidity Facility in accordance with the terms thereof so as to receive thereunder by 2:45 p.m. on such date an amount, in immediately available funds, sufficient, together with the proceeds of the remarketing of such 2022C Subordinated Bonds on such date, to enable the Trustee to pay the Purchase Price in connection therewith. The Trustee shall deposit said proceeds in the Liquidity Facility Purchase Account established for the 2022C Subordinated Bonds pursuant to Section 78.09(b) hereof.

(c) Notwithstanding the foregoing paragraphs of this Section, if the Credit Provider and the Liquidity Provider are the same entity, the Trustee shall not draw on the Credit Enhancement with respect to any payments due or made in connection with Liquidity Provider Bonds. In no event shall the Trustee draw on the Credit Enhancement or Liquidity Facility with respect to any payments made or made in connection with 2022C Subordinated Bonds not covered by the Credit Enhancement or Liquidity Facility or 2022C Subordinated Bonds owned by the District.

(d) The District may provide an Alternate Credit Enhancement or Alternate Liquidity Facility on any day on which 2022C Subordinated Bonds to be secured by such Alternate Credit Enhancement or Alternate Liquidity Facility are subject to redemption at par and not later than the fifth (5th) Business Day prior to the Expiration Date of the Credit Enhancement or Liquidity Facility then in effect and securing such 2022C Subordinated Bonds.

-40-
The District shall give the Notice Parties written notice of the proposed substitution of an Alternate Credit Enhancement or Alternate Liquidity Facility no less than two (2) Business Days prior to the date on which the Trustee is required to provide notice of the proposed substitution to the Holders of the 2022C Subordinated Bonds. The Trustee shall give notice of such Substitution Date in accordance with Section 78.02. On or before the Substitution Date there shall be delivered to the Trustee (i) the Alternate Credit Enhancement or the Alternate Liquidity Facility in substitution for the Credit Enhancement or Liquidity Facility then in effect, (ii) a Favorable Opinion of Bond Counsel, (iii) a written Opinion of Counsel for the provider of the Alternate Credit Enhancement or Alternate Liquidity Facility, as applicable, to the effect that such Alternate Credit Enhancement or Alternate Liquidity Facility is a valid, legal and binding obligation of the provider thereof, and (iv) unless waived by such entity, written evidence satisfactory to the Credit Provider and the Liquidity Provider of the provision for purchase from the Liquidity Provider of all Liquidity Provider Bonds, at a price equal to the principal amount thereof plus accrued and unpaid interest, and payment of all amounts due to the Credit Provider and the Liquidity Provider under the applicable Reimbursement Agreement(s) on or before the effective date of such Alternate Credit Enhancement or Alternate Liquidity Facility. Upon the satisfaction of the conditions described in the preceding sentence, the Trustee shall accept such Alternate Credit Enhancement or Alternate Liquidity Facility on the close of business on the Substitution Date and shall surrender the Credit Enhancement or Liquidity Facility then in effect to the provider thereof on the Substitution Date; provided, however, that the Trustee shall not surrender the Credit Enhancement or Liquidity Facility then in effect unless and until the Trustee has received all amounts drawn thereunder. If any condition to the substitution is not satisfied, the substitution shall not occur but the 2022C Subordinated Bonds shall remain subject to mandatory purchase on the proposed Substitution Date.

(e) In the event of an extension of the Expiration Date, the District shall give to the Notice Parties, a written notice of the new Expiration Date at least fifteen (15) days prior to the fifth Business Day prior to the Expiration Date in effect prior to such extension.

(f) The references to Credit Enhancement and Liquidity Facility and Credit Provider and Liquidity Provider shall be disregarded during any period during which a Credit Enhancement or Liquidity Facility, as applicable, is not in effect.

(g) The Trustee shall not have any lien on or security interest in any amounts drawn under a Credit Enhancement or a Liquidity Facility or any amounts on deposit in the account described in Section 78.08(a) above in which proceeds of draws on a Credit Enhancement are deposited or a Liquidity Facility Purchase Account.

(h) If at any time during the term of a Credit Enhancement and/or Liquidity Facility any successor Trustee shall be appointed and qualified under the Subordinate Master Resolution, the resigning or removed Trustee shall request that the Credit Provider and/or Liquidity Provider, as applicable, transfer such Credit Enhancement and/or Liquidity Facility to the successor Trustee and such resignation or removal of the Trustee shall not be effective until the Credit Enhancement and/or Liquidity Facility has been duly transferred (including the payment of any required transfer fee) to such successor Trustee. If the resigning or removed Trustee fails to make this request, the successor Trustee shall do so before accepting appointment.
The Trustee may accept, hold and draw upon a Credit Enhancement and/or a Liquidity Facility issued by itself or by any of its corporate affiliates to provide security and a source of payment for the 2022C Subordinated Bonds. The Trustee covenants that it shall at all times maintain adequate controls to manage any potential conflict of interest. Notwithstanding any other provision herein to the contrary, while the Credit Provider and/or Liquidity Provider is the Trustee or an affiliate of the Trustee and such Credit Provider and/or Liquidity Provider has not failed to honor a properly presented draw on the Credit Enhancement and/or Liquidity Facility, the Trustee shall have no discretion with respect to the acceleration of the 2022C Subordinated Bonds and shall do so only upon the written direction of such Credit Provider and/or Liquidity Provider and as otherwise permitted by the Subordinate Master Resolution. The Trustee shall immediately tender its resignation and take prompt steps to have a successor trustee appointed satisfying the requirements of the Subordinate Master Resolution if such affiliated Credit Provider and/or Liquidity Provider shall fail at any time to honor a properly presented and conforming draw on the Credit Enhancement and/or Liquidity Facility.

Section 78.09. Purchase Fund. There is hereby established and there shall be maintained with the Trustee a separate fund to be known as the “Purchase Fund.” The Trustee shall further establish separate accounts within the Purchase Fund to be known as the “Liquidity Facility Purchase Account”, the “Remarketing Proceeds Account” and the “District Purchase Account”. At any time at which there is a Liquidity Facility in effect with respect to the 2022C Subordinated Bonds, the Purchase Fund shall be required to be an Eligible Account.

(a) Remarketing Proceeds Account. Upon receipt of the proceeds of a remarketing of a 2022C Subordinated Bond on the date such 2022C Subordinated Bond is to be purchased, the Trustee shall deposit such proceeds in the Remarketing Proceeds Account for application to the Purchase Price of such 2022C Subordinated Bond. Notwithstanding the foregoing, upon the receipt of the proceeds of a remarketing of Liquidity Provider Bonds, the Trustee shall immediately pay such proceeds to the Liquidity Provider to the extent of any amount owing to the Liquidity Provider.

(b) Liquidity Facility Purchase Account. Upon receipt of the immediately available funds pursuant to Section 78.08(b), the Trustee shall deposit such money in the Liquidity Facility Purchase Account for application to the Purchase Price of the 2022C Subordinated Bonds to the extent that the moneys on deposit in the Remarketing Proceeds Account shall not be sufficient. Any amounts deposited in the Liquidity Facility Purchase Account and not needed with respect to the Purchase Price of any 2022C Subordinated Bonds shall be immediately returned to the Liquidity Provider.

(c) District Purchase Account. Upon receipt of funds from the District pursuant to Section 78.04, the Trustee shall deposit such funds in the District Purchase Account for application to the Purchase Price of the 2022C Subordinated Bonds. Any amounts deposited in the District Purchase Account and not needed with respect to the Purchase Price for any 2022C Subordinated Bonds shall be immediately returned to the District.

(d) Investment. Amounts held in the Liquidity Facility Purchase Account, the Remarketing Proceeds Account and the District Purchase Account by the Trustee shall be held uninvested and separate and apart from all other funds and accounts.
Section 78.10. Inadequate Funds for Tenders.

(a) If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to the 2022C Subordinated Bonds shall be returned to the Remarketing Agent for return to the Persons providing such moneys. Thereafter, the Trustee shall continue to take all such action available to it to obtain remarketing proceeds with respect to all Tendered Bonds from the Remarketing Agent and sufficient other funds from the Liquidity Provider, if any, or, subject to Section 78.04, the District to effect a subsequent successful remarketing or purchase of any Tendered Bonds.

(b) All Tendered Bonds (other than Liquidity Provider Bonds and 2022C Subordinated Bonds in the Direct Purchase Index Mode) shall bear interest at the Maximum Rate (or such lower interest rate or rates specified in the Sales Certificate for the initial Interest Rate Mode or in writing by the District prior to the first day of any subsequent Interest Rate Mode, Index Rate Period or Term Rate Period) during the period of time from and including the applicable Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarceted, redeemed, purchased or paid (the “Delayed Remarketing Period”).

(c) The District may direct the conversion of the Tendered Bonds to a different Interest Rate Mode, Index Rate Period or Term Rate Period during the Delayed Remarketing Period in accordance with Section 76.11 hereof; provided that the District shall not be required to comply with the notice requirements described in Section 76.11.

(d) Subject to the terms of the Remarketing Agreement, if any, the Remarketing Agent shall continue to use its best efforts to remarket all of the Tendered Bonds at rates up to and including the Maximum Rate.

(e) During the Delayed Remarketing Period, the Trustee may, upon direction of the District, apply amounts on deposit in the Redemption Fund to the redemption of such Tendered Bonds, as a whole or in part on any Business Day during the Delayed Remarketing Period, at a redemption price equal to the principal amount thereof, together with interest accrued thereon to the date fixed for redemption, without premium. Notwithstanding Section 77.08 to the contrary, the Trustee shall give five Business Days’ notice of such redemption to the Holders of the 2022C Subordinated Bonds to be redeemed.

(f) During the Delayed Remarketing Period, interest on such Tendered Bonds (other than 2022C Subordinated Bonds in the Direct Purchase Index Mode) shall be paid to the Holders thereof (i) on the first Business Day of each calendar month occurring during the Delayed Remarketing Period and (ii) on the last day of the Delayed Remarketing Period.
ARTICLE LXXIX

REMARKETING AGENT

Section 79.01. Appointment of Remarketing Agent.

(a) The Remarketing Agent shall be appointed pursuant to the Remarketing Agreement to remarket 2022C Subordinated Bonds pursuant to this Thirteenth Supplemental Resolution and perform the other duties of the Remarketing Agent described hereunder, and to keep such books and records as shall be consistent with prudent industry practice and to make such books and records available for inspection by the District and the Trustee at all reasonable times. The Remarketing Agent shall act as such under the Remarketing Agreement.

(b) The Remarketing Agent may at any time resign and be discharged of the duties and obligations created by this Thirteenth Supplemental Resolution as set forth in the Remarketing Agreement. The Remarketing Agent may suspend its remarketing efforts as set forth in the Remarketing Agreement. The Remarketing Agent may be removed at any time, at the direction of the District as set forth in the Remarketing Agreement. Any successor Remarketing Agent shall be selected by the District, and shall be a member of the Financial Industry Regulatory Authority, or its successors, shall have a capitalization of at least fifteen million dollars ($15,000,000), shall be authorized by law to perform all the duties set forth in this Thirteenth Supplemental Resolution and shall be acceptable to the Credit Provider and Liquidity Provider. The District’s delivery to the Trustee of a certificate setting forth the effective date of the appointment of a successor Remarketing Agent and the name of such successor shall be conclusive evidence that (i) if applicable, the predecessor Remarketing Agent has been removed in accordance with the provisions of this Thirteenth Supplemental Resolution and (ii) such successor has been appointed and is qualified to act as Remarketing Agent under the terms of this Thirteenth Supplemental Resolution.

(c) If the Remarketing Agent consolidates with, merges or converts into, or transfers all or substantially all of its assets (or, in the case of a bank, national banking association or trust company, its corporate assets) to, another corporation, the resulting, surviving or transferee corporation without any further act shall be the successor Remarketing Agent.

ARTICLE LXXX

MISCELLANEOUS

Section 80.01. 2022C Subordinated Sinking Fund Account; Payments of Interest, Principal and Redemption Price and Defeasance While Credit Enhancement in Effect.

(a) An account is hereby established within the Subordinated Bonds Interest and Principal Fund to be designated the “Series 2022C Sinking Fund Account.” The Treasurer shall deposit in the Series 2022C Sinking Fund Account the mandatory sinking fund account payments in the amounts, on the mandatory sinking fund account payment dates, set forth in
Section 77.05(a) and shall transfer such amounts to the Trustee on such date for application as provided in Section 80.01(b).

(b) On each mandatory sinking fund account payment date established for the 2022C Subordinated Bonds, the Trustee shall apply the mandatory sinking fund account payment required on that date to the redemption (or payment at maturity, as the case may be) of the 2022C Subordinated Bonds for which the mandatory sinking fund account payment has been made, upon the notice and in the manner provided in Section 77.08; provided that, at any time prior to giving such notice of such redemption, the Trustee shall, upon direction of the District, apply such moneys to the purchase of such 2022C Subordinated Bonds at public or private sale, as and when and at such prices (including brokerage and other charges, but excluding accrued interest) as the District may direct, except that the purchase price (excluding accrued interest) shall not exceed the par amount of such 2022C Subordinated Bonds. If, during the twelve-month period immediately preceding said mandatory sinking fund account payment date, the Trustee has purchased 2022C Subordinated Bonds with moneys in the Series 2022C Sinking Fund Account, or, during said period and prior to giving said notice of redemption, the District has deposited 2022C Subordinated Bonds with the Trustee, such 2022C Subordinated Bonds so purchased or deposited or redeemed shall be applied, to the extent of the full principal amount thereof, to reduce said mandatory sinking fund account payment. All 2022C Subordinated Bonds purchased or deposited pursuant to this subsection shall be cancelled and destroyed by the Trustee. All 2022C Subordinated Bonds purchased from the Series 2022C Sinking Fund Account or deposited by the District with the Trustee shall be allocated first to the next succeeding mandatory sinking fund account payment, then to the remaining mandatory sinking fund account payments as selected by the District.

(c) Any moneys remaining in the Series 2022C Sinking Fund Account after all 2022C Subordinated Bonds have been retired shall be returned to the District for any lawful District use.

(d) Notwithstanding the foregoing provisions of this Section 80.01 or Section 5.02 or any other provision of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2022C Subordinated Bonds, the principal and Redemption Price of, and interest on, the 2022C Subordinated Bonds shall be paid solely (1) first, from moneys obtained from a drawing on the Credit Enhancement pursuant to Section 78.08(a) and (2) second, in the event moneys are not available pursuant to clause (1) for such purpose for any reason, from Available Moneys and moneys on deposit in the Series 2022C Sinking Fund Account shall be withdrawn by the Trustee and used solely for the purpose reimbursing the Credit Provider for drawings under the Credit Enhancement. To the extent the Credit Provider honors a drawing under the Credit Enhancement for the purpose of paying the principal or Redemption Price of, or interest on, the 2022C Subordinated Bonds, the District shall receive a credit against its obligation to make deposits into the Subordinated Bonds Interest and Principal Fund and shall not be required to transfer funds to the Trustee in the amount of such drawing.

(e) Notwithstanding the provisions of Article X of the Subordinate Master Resolution, unless a Credit Provider Failure has occurred and is continuing, if Credit Enhancement is in effect with respect to the 2022C Subordinated Bonds, 2022C Subordinated
Bonds shall not be deemed defeased or otherwise paid or satisfied unless such 2022C Subordinated Bonds are defeased with (1) moneys obtained from a drawing on the Credit Enhancement pursuant to Section 78.08(a), (2) Available Moneys or (3) Defeasance Securities acquired with moneys described in (1) or (2). Any Defeasance Securities used to defease 2022C Subordinated Bonds for which Credit Enhancement is in effect shall be not callable by the issuer thereof prior to maturity and shall mature no later than the earlier of (x) the first day upon which such 2022C Subordinated Bonds may be tendered or (y) the first day upon which such 2022C Subordinated Bonds may be redeemed. For purpose of Article X of the Subordinate Master Resolution, interest on the 2022C Subordinated Bonds shall be calculated based on an assumed interest rate equal to the Maximum Rate for periods for which the actual interest rate on the 2022C Subordinated Bonds cannot be determined.

Section 80.02. Form and Execution of 2022C Subordinated Bonds. The 2022C Subordinated Bonds, and the certificate of authentication and registration to be executed thereon, shall be in substantially the form set forth as Exhibit A to this Thirteenth Supplemental Resolution.

The 2022C Subordinated Bonds shall be executed in the name and on behalf of the District with the manual or facsimile signature of the President or Vice President of its Board of Directors. The 2022C Subordinated Bonds shall then be delivered to the Trustee for authentication by it. In case any officer who shall have signed any of the 2022C Subordinated Bonds shall cease to be such officer of the District before the 2022C Subordinated Bonds so signed shall have been authenticated or delivered by the Trustee or issued by the District, such 2022C Subordinated Bonds may nevertheless be authenticated, delivered and issued and, upon such authentication, delivery and issue, shall be as binding upon the District as though those who signed the same had continued to be such officer of the District, and also any 2022C Subordinated Bond may be signed on behalf of the District by such person as at the actual date of execution of such 2022C Subordinated Bond shall be the proper officer of the District although at the nominal date of such 2022C Subordinated Bond any such person shall not have been such officer of the District.

Only such of the 2022C Subordinated Bonds as shall bear thereon a certificate of authentication substantially in the form set forth in Exhibit A to this Thirteenth Supplemental Resolution, manually executed by an authorized signatory of the Trustee, shall be valid or obligatory for any purpose or entitled to the benefits of the Subordinate Master Resolution, and such certificate of the Trustee shall be conclusive evidence that the 2022C Subordinated Bonds so authenticated have been duly executed, authenticated and delivered hereunder and are entitled to the benefits of the Subordinate Master Resolution.

Section 80.03. Issuance of 2022C Subordinated Bonds. At any time after the adoption of this Thirteenth Supplemental Resolution, the District may execute and deliver the 2022C Subordinated Bonds in the aggregate principal amount set forth in the Sales Certificate. The Trustee shall authenticate and deliver the 2022C Subordinated Bonds upon written order of the District. The proceeds of the sale of the 2022C Subordinated Bonds shall be deposited and applied as set forth in the Sales Certificate.
Section 80.04. Use of Depository. Notwithstanding any provision of the Subordinate Master Resolution or this Thirteenth Supplemental Resolution to the contrary:

(a) The 2022C Subordinated Bonds shall be initially issued as provided in Section 76.02; provided, that 2022C Subordinated Bonds in the Direct Purchase Index Mode shall be issued in definitive certificated form registered in the name of the Holder thereof or as otherwise directed by the Holder. 2022C Subordinated Bonds in any other Interest Rate Mode shall be registered in the name of Cede & Co. or as otherwise directed by the Securities Depository and registered ownership thereof, or any portion thereof, may not thereafter be transferred except:

(i) To any successor of DTC or its nominee, or to any substitute depository designated pursuant to clause (ii) of this subsection (a) (“substitute depository”); provided that any successor of DTC or substitute depository shall be qualified under any applicable laws to provide the service proposed to be provided by it;

(ii) To any substitute depository not objected to by the Trustee, upon (1) the resignation of DTC or its successor (or any substitute depository or its successor) from its functions as depository or (2) a determination by the District that DTC or its successor (or any substitute depository or its successor) is no longer able to carry out its functions as depository; provided that any such substitute depository shall be qualified under any applicable laws to provide the services proposed to be provided by it; or

(iii) To any person as provided below, upon (1) the resignation of DTC or its successor (or substitute depository or its successor) from its functions as depository; provided that no substitute depository which is not objected to by the Trustee can be obtained or (2) a determination by the District that it is in the best interests of the District to remove DTC or its successor (or any substitute depository or its successor) from its functions as depository.

(b) In the case of any transfer pursuant to clause (i) or clause (ii) of subsection 80.04(a) hereof, upon receipt of all outstanding 2022C Subordinated Bonds by the Trustee, together with a Certificate of the District to the Trustee, a single new 2022C Subordinated Bond shall be executed and delivered for each maturity of 2022C Subordinated Bonds then outstanding registered in the name of such successor or such substitute depository, or their nominees, as the case may be, all as specified in such Certificate of the District. In the case of any transfer pursuant to clause (iii) of subsection 80.04(a) hereof, upon receipt of all outstanding 2022C Subordinated Bonds by the Trustee together with a Certificate of the District to the Trustee, new 2022C Subordinated Bonds shall be executed and delivered in such denominations and registered in the names of such persons as are requested in such a Certificate of the District, subject to the limitations of Section 80.04(a) hereof, provided the Trustee shall not be required to deliver such new 2022C Subordinated Bonds within a period less than 60 days from the date of receipt of such a Certificate of the District. Subsequent to any transfer pursuant to clause (iii) of subsection 80.04(a) hereof, the 2022C Subordinated Bonds shall be transferred as provided in Article II of the Subordinate Master Resolution.
(c) In the case of partial redemption or an advance refunding of the 2022C Subordinated Bonds evidencing all or a portion of the principal maturing in a particular year, DTC shall make an appropriate notation on the 2022C Subordinated Bonds indicating the date and amounts of such reduction in principal. The Trustee shall incur no liability for the failure or any error by DTC in making such notation and the records of the Trustee shall be determinative of the outstanding principal amount of 2022C Subordinated Bonds.

(d) The District and the Trustee shall be entitled to treat the person in whose name any 2022C Subordinated Bond is registered as the Bondholder thereof for all purposes of the Subordinate Master Resolution and any applicable laws, notwithstanding any notice to the contrary received by the Trustee or the District; and the District and the Trustee shall have no responsibility for transmitting payments to, communicating with, notifying, or otherwise dealing with, any Beneficial Owners of the 2022C Subordinated Bonds. Neither the District nor the Trustee will have any responsibility or obligations, legal or otherwise, to the Beneficial Owners or to any other party including DTC or its successor (or substitute depository or its successor), except for the Holder of any 2022C Subordinated Bond.

(e) During any period that the Outstanding 2022C Subordinated Bonds are registered in the name of Cede & Co. or its registered assigns, the District and the Trustee (to the extent funds are provided to it by the District) shall cooperate with Cede & Co., as sole registered Bondholder, and its registered assigns, in effecting payment of the principal of and redemption premium, if any, and interest on the 2022C Subordinated Bonds by arranging for payment in such manner that funds for such payments are properly identified and are made immediately available on the date they are due.

Section 80.05. Tax Covenants.

(a) The District shall at all times do and perform all acts and things permitted by law which are necessary or desirable in order to assure that interest paid on the 2022C Subordinated Bonds (or any of them) will be excluded from gross income for federal income tax purposes and shall take no action that would result in such interest not being excluded from gross income for federal income tax purposes. Without limiting the generality of the foregoing, the District agrees to comply with the provisions of the 2022 Tax Certificate. This covenant shall survive payment in full or defeasance of the 2022C Subordinated Bonds.

(b) Without limiting the generality of the foregoing, the District agrees that there shall be paid from time to time all amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Internal Revenue Code of 1986 (the “Code”) and any temporary, proposed or final United States Treasury Regulations as may be applicable to the 2022C Subordinated Bonds from time to time (the “Rebate Requirement”). The District specifically covenants to pay or cause to be paid the Rebate Requirement as provided in the 2022 Tax Certificate to the United States of America from any Net Subordinate Revenues lawfully available to the District. This covenant shall survive payment in full or defeasance of the 2022C Subordinated Bonds. Capitalized terms in this Section not otherwise defined in the Subordinate Master Resolution or this Thirteenth Supplemental Resolution shall have the meanings ascribed to them in the 2022 Tax Certificate.
(c) The District shall establish, maintain and hold in trust a fund separate from any other fund established and maintained hereunder designated the Rebate Fund. The District shall cause to be deposited in the Rebate Fund the Rebate Requirement as provided in the 2022 Tax Certificate. Subject to the provisions of this Section, moneys held in the Rebate Fund are hereby pledged to secure payments to the United States government, and the District and the Bondholders shall have no rights in or claim to such moneys.

(d) In accordance with the 2022 Tax Certificate, the District shall remit part or all of the balance held in the Rebate Fund to the United States government as so directed.

(e) Notwithstanding any provision of this Section, if the District shall obtain an opinion of counsel of recognized national standing in the field of obligations the interest on which is excluded from gross income for purposes of federal income taxation to the effect that any specified action required under this Section is no longer required, or to the effect that some different action is required, to maintain the exclusion from gross income of the interest on the 2022C Subordinated Bonds under Section 103 of the Code, the District may rely conclusively on such opinion in complying with the provisions hereof, and the agreements and covenants hereunder shall be deemed to be modified to that extent without the necessity of an amendment of the Subordinate Master Resolution or this Thirteenth Supplemental Resolution or the consent at any time of the Bondholders.

Section 80.06. Rights of Credit Provider.

(a) Unless a Credit Provider Failure has occurred and is continuing, the Credit Provider shall be deemed the sole Holder of the 2022C Subordinated Bonds for the purpose of directing the Trustee with respect to the exercise of remedies and the declaration or waiver of Events of Default pursuant to Article IX of the Subordinate Resolution.

(b) Unless a Credit Provider Failure has occurred and is continuing, the Subordinate Master Resolution and this Thirteenth Supplemental Resolution shall not be amended without the written consent of the Credit Provider.

(c) Unless a Credit Provider Failure has occurred and is continuing, the District shall not appoint a successor Remarketing Agent or Trustee without the written consent of the Credit Provider.

Section 80.07. Limitations on Rights of Trustee.

(a) Proceeds of drawings on the Credit Enhancement and the Liquidity Facility and moneys on deposit in the Purchase Fund shall be used solely for the purposes set forth herein, and the Trustee shall have no lien on such proceeds or money, nor shall such proceeds or moneys be used for, the payment of the fees and/or expenses of the Trustee.

(b) The Trustee shall draw on the Credit Enhancement and the Liquidity Facility at the times and in the manner provided herein and therein and shall have no right to seek or obtain indemnification from the District, the Holders or any other party as a condition of making any such drawing.
Section 80.08. Terms of 2022C Subordinated Bonds Subject to the Subordinate Master Resolution.

(a) Except as in this Thirteenth Supplemental Resolution expressly provided, every term and condition contained in the Subordinate Master Resolution shall apply to this Thirteenth Supplemental Resolution and to the 2022C Subordinated Bonds with the same force and effect as if the same were herein set forth at length, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Thirteenth Supplemental Resolution.

(b) This Thirteenth Supplemental Resolution and all the terms and provisions herein contained shall form part of the Subordinate Master Resolution as fully and with the same effect as if all such terms and provisions had been set forth in the Subordinate Master Resolution. The Subordinate Master Resolution is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof, as supplemented and amended hereby.

Section 80.09. Resolution of Trust to Remain in Effect. Save and except as supplemented by this Thirteenth Supplemental Resolution, the Subordinate Master Resolution shall remain in full force and effect.

Section 80.10. Notice to Rating Agencies. (a) The District shall provide or cause to be provided prompt notice of the following events to the Rating Agencies, if any:

(1) the expiration, termination, extension or substitution of any Credit Enhancement or Liquidity Facility relating to the 2022C Subordinated Bonds;

(2) any optional redemption (as a whole or in part), mandatory purchase or acceleration of the 2022C Subordinated Bonds;

(3) any Conversion of the 2022C Subordinated Bonds;

(4) any amendment, modification or supplement of or to the Subordinate Master Resolution or any Credit Enhancement or Liquidity Facility relating to the 2022C Subordinated Bonds (which notice shall be provided or caused to be provided at least ten days prior to the effective date thereof);

(5) any change in the party instructed to draw on any Credit Enhancement or Liquidity Facility relating to the 2022C Subordinated Bonds;

(6) any removal or resignation of the Trustee or the Remarketing Agent; or

(7) any legal defeasance of the 2022C Subordinated Bonds.

(b) The District and the Trustee shall provide or cause to be provided to the Rating Agencies any information reasonably requested by such Rating Agency to maintain its rating, if any, on the 2022C Subordinated Bonds.
Section 80.11. Continuing Disclosure. The District hereby covenants and agrees that it will comply with and carry out all of the provisions of any Continuing Disclosure Agreement executed in connection with the 2022C Subordinated Bonds. Notwithstanding any other provision of the Subordinate Master Resolution or this Thirteenth Supplemental Resolution, failure of the District to comply with any such Continuing Disclosure Agreement shall not be considered an Event of Default; however, the Trustee shall, at the written request of any Participating Underwriter (as defined in any such Continuing Disclosure Agreement) or the Holders of at least 25% aggregate principal amount of Outstanding 2022C Subordinated Bonds upon receipt of indemnity satisfactory to the Trustee or any Holder of 2022C Subordinated Bonds or Beneficial Owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Section. For purposes of this Section, “Beneficial Owner” means any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2022C Subordinated Bonds (including persons holding 2022C Subordinated Bonds through nominees, depositaries or other intermediaries).

Section 80.12. Designation of Credit Provider and Liquidity Provider Reimbursement Obligations as Parity Subordinated Debt; Authorization and Issuance of Revolving Notes. For the avoidance of doubt, the District hereby designates as Parity Subordinated Debt any and all obligations of the District pursuant to any Credit Enhancement, Liquidity Facility, or Reimbursement Agreement to reimburse each Credit Provider or Liquidity Provider for drawings or other advances on or pursuant to the related Credit Enhancement or Liquidity Facility, including, without limitation, any accrued interest on such drawings or advances, all as set forth in the related Credit Enhancement, Liquidity Facility, or Reimbursement Agreement (collectively, the “Reimbursement Obligations”). In order to more fully evidence the Reimbursement Obligations as Parity Subordinated Debt, the Board hereby authorizes the issuance from time to time of one or more revenue bonds pursuant to the Act in substantially the form of and with the terms stated in the form of the revolving note set forth as Exhibit B to this Thirteenth Supplemental Resolution (each a “Revolving Note”). At the time of each delivery of a Credit Enhancement or Liquidity Facility pursuant to the terms of this Thirteenth Supplemental Resolution, the District shall deliver a Revolving Note to the related Credit Provider or Liquidity Provider with a stated amount equal to the Available Amount under such Credit Enhancement or Liquidity Facility and with all blanks and brackets filled in as appropriate and with such other changes as may be necessary or appropriate to conform to the terms of such Credit Enhancement, Liquidity Facility, or Reimbursement Agreement.
EXHIBIT A

FORM OF 2022C SUBORDINATED BOND

[TO BE CONFORMED TO SALES CERTIFICATE]

No. R-- $_____________

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SUBORDINATED ELECTRIC REVENUE REFUNDING BOND

2022 SERIES C

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Interest Per Annum</th>
<th>Date</th>
<th>CUSIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 15, 20__</td>
<td>Variable</td>
<td>_____, 2022</td>
<td></td>
</tr>
</tbody>
</table>

REGISTERED OWNER: ____________

PRINCIPAL AMOUNT: ____________ DOLLARS

SACRAMENTO MUNICIPAL UTILITY DISTRICT, a municipal utility district duly organized and existing under and pursuant to the laws of the State of California (the "District"), for value received, hereby promises to pay (but only out of the Net Subordinated Revenues hereinafter referred to) to the registered owner named above or registered assigns, on the maturity date specified above, the principal sum specified above together with interest thereon from _____, 2022, until the principal hereof shall have been paid, at the interest rates per annum determined as set forth below, payable on each Interest Payment Date, as defined below. The principal of and premium, if any, and interest on the 2022C Subordinated Bonds, as defined below, shall be payable in lawful money of the United States of America. Interest on the 2022C Subordinated Bonds shall be paid on each Interest Payment Date, as defined below, by the Paying Agent during a Daily Mode, Weekly Mode, Term Rate Mode, Index Mode or Fixed Rate Mode, by check mailed on the date on which due to the Holders of the 2022C Subordinated Bonds at the close of business on the Record Date for the 2022C Subordinated Bonds in respect of such Interest Payment Date at the registered addresses of the Holders of the 2022C Subordinated Bonds as shall appear on the registration books of the Trustee. In the case of (i) 2022C Subordinated Bonds in a Direct Purchase Index Mode or Flexible Mode or (ii) any Holder of 2022C Subordinated Bonds in any Interest Rate Mode other than a Direct Purchase Index Mode or Flexible Mode in an aggregate principal amount in excess of $1,000,000 as shown on the registration books of the Trustee who, prior to the Record Date for the 2022C Subordinated Bonds next preceding any Interest Payment Date, shall have provided the Paying Agent with written wire transfer instructions, interest payable on such 2022C Subordinated Bonds shall be paid on each Interest Payment Date in accordance with the wire transfer instructions provided by the Holder of such 2022C Subordinated Bond; provided, however, that during any Flexible Rate Period, except for 2022C Subordinated Bonds registered in the name of the Securities Depository
(or its nominee), interest on any such 2022C Subordinated Bond shall be payable only upon surrender of such 2022C Subordinated Bond at the office of the Paying Agent. The principal of and premium, if any, on each 2022C Subordinated Bond shall be payable on the Principal Payment Date of such 2022C Subordinated Bond upon surrender thereof at the office of the Paying Agent, subject to the terms of the Thirteenth Supplemental Resolution, as defined below.

This Bond is one of a duly authorized issue of Sacramento Municipal Utility District Subordinated Electric Revenue Bonds (hereinafter called the “Subordinated Bonds”) designated as Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “2022C Subordinated Bonds”). The Subordinated Bonds are not limited in aggregate principal amount, except as otherwise provided in the Subordinate Resolution hereinafter mentioned, and consist or may consist of one or more series of varying denominations, dates, maturities, interest rates and other provisions, as in said Subordinate Resolution provided, all issued and to be issued pursuant to the provisions of the Revenue Bond Law of 1941 as made applicable by Article 6a of Chapter 6, Division 6, of the California Public Utilities Code and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (hereinafter called the “Act”). This 2022C Subordinated Bond is issued pursuant to Resolution No. 85-11-1 of the District, adopted November 7, 1985, providing for the issuance of the Subordinated Bonds, as amended and restated by Resolution No. 01-06-10 of the District, adopted on June 21, 2001 (as amended and restated, the “Subordinate Master Resolution”), and as supplemented and amended by resolutions to date, including by a Thirteenth Supplemental Resolution, adopted May 19, 2022, authorizing the issuance of the 2022C Subordinated Bonds (said resolution as amended, restated and supplemented and the Thirteenth Supplemental Resolution being hereinafter collectively called the “Subordinate Resolution”). Reference is hereby made to the Subordinate Resolution and the Act for a description of the terms on which the Subordinated Bonds are issued and to be issued, the provisions with regard to the nature and extent of the Revenues, as that term is defined in the Subordinate Resolution, and the rights of the registered owners of the Subordinated Bonds; and all the terms of the Subordinate Resolution and the Act are hereby incorporated herein and constitute a contract between the District and the registered owner from time to time of this 2022C Subordinated Bond, and to all the provisions thereof the registered owner of this 2022C Subordinated Bond, by its acceptance hereof, consents and agrees. Additional bonds may be issued on a parity with the Subordinated Bonds of this authorized issue, but only subject to the conditions and limitations contained in the Subordinate Resolution. Capitalized terms used, but not defined herein shall have the meaning given such terms in the Subordinate Resolution.

The Subordinated Bonds and the interest thereon, together with the Parity Subordinated Debt (as defined in the Subordinate Resolution) heretofore or hereafter issued by the District, and the interest thereon, are payable from, and are secured by a charge and lien on, the Net Subordinated Revenues derived by the District from the Electric System (as those terms are defined in the Subordinate Resolution). The District covenants and warrants that for the payment of the Subordinated Bonds, and interest thereon, there have been created and will be maintained by the District special funds into which there shall be deposited from Net Subordinated Revenues available for that purpose sums sufficient to pay the principal of, and interest on, all of the Subordinated Bonds, as such principal and interest become due, and as an irrevocable charge the District has allocated Net Subordinated Revenues to such payment, all in accordance with the Subordinate Resolution.
The Subordinated Bonds, including the 2022C Subordinated Bonds, are expressly
subordinated in right of payment to the prior payment in full of all Parity Bonds, as that term is
defined in Resolution No. 6649 of the District, adopted on January 7, 1971 (the “Senior Bond
Resolution”), including the District’s Electric Revenue Bonds. The holder of this 2022C
Subordinated Bond, by acceptance hereof, authorizes and directs the Trustee on its behalf to take
such action as may be necessary or appropriate to effectuate the subordination provided in this
paragraph and in the Subordinate Resolution and appoints the Trustee its attorney-in-fact for any
and all such purposes.

The Subordinated Bonds are special obligations of the District, and are payable, both as
to principal and interest, out of the Net Subordinated Revenues pertaining to the Electric System,
and not out of any other fund or moneys of the District. No holder of this Bond shall ever have
the right to compel any exercise of the taxing power of the District to pay this Bond or the
interest hereon.

The term of the 2022C Subordinated Bonds will be divided into consecutive Interest
Periods during each of which the 2022C Subordinated Bonds shall bear interest at a Flexible
Rate or Flexible Rates, a Daily Rate, a Weekly Rate, a Direct Purchase Index Rate, a Term Rate,
an Index Rate or a Fixed Rate or Fixed Rates. The 2022C Subordinated Bonds shall initially
bear interest at the Index Rate for an initial Index Rate Period ending on [______, 20__]. The
Interest Rate Mode, Term Rate Period, Index Rate Period and Direct Purchase Index Rate Period
for the 2022C Subordinated Bonds thereafter may be changed from time to time as provided in
the Subordinate Resolution. As hereinafter described, the 2022C Subordinated Bonds are subject
to mandatory purchase on any Conversion Date.

Interest on the 2022C Subordinated Bonds is to be paid on: (i) with respect to Flexible
Rate Bonds, each Mandatory Purchase Date applicable thereto; (ii) with respect to 2022C
Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Index
Mode, the first Business Day of each month; (iii) with respect to 2022C Subordinated Bonds in a
Term Rate Mode or Fixed Rate Mode, each February 15 and August 15 (beginning with the first
such day which is at least three months after the date of initial issuance of the 2022C
Subordinated Bonds or the Conversion Date to such Term Rate Mode, as applicable); (iv)
(without duplication as to any Interest Payment Date listed above) any Mandatory Purchase
Date; (v) (without duplication as to any Interest Payment Date listed above) each Maturity Date;
and (vi) with respect to any Liquidity Provider Bonds, as provided in the Reimbursement
Agreement (each an “Interest Payment Date”).

The interest rate on the 2022C Subordinated Bonds shall be determined as follows:

Determination of Flexible Rates and Interest Periods During Flexible Mode. An Interest
Period for the Flexible Rate Bonds shall be of such duration of from one to 270 calendar days,
ending on either a day which immediately precedes a Business Day or the day immediately
preceding the Maturity Date, as the Remarketing Agent shall determine in accordance with the
provisions of this Section. A Flexible Rate Bond may have an Interest Period, and bear interest
at a Flexible Rate, different than another Flexible Rate Bond. In making the determinations with
respect to Interest Periods, subject to limitations imposed by the second preceding sentence and
in Section 76.04 of the Thirteenth Supplemental Resolution, on each Rate Determination Date

4151-1692-6007.3
for a Flexible Rate Bond, the Remarketing Agent shall select for such 2022C Subordinated Bond the Interest Period which would result in the Remarketing Agent being able to remarket such 2022C Subordinated Bond at par in the secondary market at the lowest average interest cost for all 2022C Subordinated Bonds; provided, however, that if the Remarketing Agent has received notice from the District that such 2022C Subordinated Bonds are to be changed from the Flexible Mode to any other Interest Rate Mode, the Remarketing Agent shall select Interest Periods which do not extend beyond the proposed Conversion Date.

Except while the 2022C Subordinated Bonds are registered in a Book-Entry System, in order to receive payment of the Purchase Price the Holder of any Flexible Rate Bond must present such Flexible Rate Bond to the Trustee, by 12:00 noon on the Rate Determination Date, in which case the Trustee shall pay the Purchase Price to such Holder by 3:00 p.m. on the same day.

By 1:00 p.m. on each Rate Determination Date, the Remarketing Agent, with respect to each Flexible Rate Bond which is subject to adjustment on such date, shall determine the Flexible Rate(s) for the Interest Periods then selected for such Flexible Rate Bond and shall give notice by Electronic Means to the Paying Agent and the District of the Interest Period, the Purchase Date(s) and the Flexible Rate(s). The Remarketing Agent shall make the Flexible Rate and Interest Period available after 2:00 p.m. on each Rate Determination Date by telephone or Electronic Means to the Trustee or any other Paying Agent without request, and to any Beneficial Owner or Notice Party requesting such information.

Determination of Interest Rates During the Daily Mode and the Weekly Mode. The interest rate for 2022C Subordinated Bonds in the Daily Mode or Weekly Mode shall be the rate of interest per annum determined by the Remarketing Agent on and as of the applicable Rate Determination Date as the minimum rate of interest which, in the opinion of the Remarketing Agent under then-existing market conditions, would result in the sale of such 2022C Subordinated Bonds in the Daily Rate Period or Weekly Rate Period, as applicable, at a price equal to the principal amount thereof, plus interest, if any, accrued through the Rate Determination Date during the then current Interest Accrual Period.

During the Daily Mode, the Remarketing Agent shall establish the Daily Rate by 10:00 a.m. on each Rate Determination Date. The Daily Rate for any day during the Daily Mode which is not a Business Day shall be the Daily Rate established on the immediately preceding Rate Determination Date. The Remarketing Agent shall make the Daily Rate available no less frequently than once per week by Electronic Means to each Notice Party requesting such rate.

During the Weekly Mode, the Remarketing Agent shall establish the Weekly Rate by 4:00 p.m. on each Rate Determination Date. The Weekly Rate shall be in effect during the applicable Weekly Rate Period. The Remarketing Agent shall make the Weekly Rate available after 5:00 p.m. on the Business Day following the Rate Determination Date by Electronic Means to each Notice Party requesting such rate.

Term Rates. The Term Rate shall be determined by the Remarketing Agent not later than 4:00 p.m. on the Rate Determination Date. The Term Rate shall be the minimum rate which, in the sole judgment of the Remarketing Agent, would result in a sale of such 2022C Subordinated
Bonds at a price equal to the principal amount thereof on the Rate Determination Date for the Interest Period selected by the District in writing delivered to the Remarketing Agent before such Rate Determination Date. No Interest Period in the Term Rate Mode may extend beyond the Maturity Date. The Remarketing Agent shall make the Term Rate available by telephone or Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Term Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such rate by Electronic Means.

**Fixed Rates.** The Remarketing Agent shall determine the Fixed Rate for 2022C Subordinated Bonds being converted to the Fixed Rate Mode in the manner and at the times as follows: not later than 4:00 p.m. on the applicable Rate Determination Date, the Remarketing Agent shall determine the Fixed Rate (or Fixed Rates, if such 2022C Subordinated Bonds will have Serial Maturity Dates in accordance with Section 76.11(b)(v) of the Thirteenth Supplemental Resolution). Except as set forth in Section 76.11(b)(v) of the Thirteenth Supplemental Resolution, the Fixed Rate shall be the minimum interest rate which, in the sole judgment of the Remarketing Agent, will result in a sale of such 2022C Subordinated Bonds at a price equal to the principal amount thereof on the Rate Determination Date. The Remarketing Agent shall make the Fixed Rate available by telephone or by Electronic Means after 5:00 p.m. on the Rate Determination Date to any Notice Party requesting such Fixed Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such Fixed Rate by Electronic Means. Subject to Section 76.11(b)(v) of the Thirteenth Supplemental Resolution, the Fixed Rate so established shall remain in effect until the Maturity Date of such 2022C Subordinated Bonds.

**Alternate Rates.** The following provisions shall apply in the event (i) the Remarketing Agent fails or is unable to determine the interest rate or Interest Period for 2022C Subordinated Bonds (other than 2022C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode), (ii) the method by which the Remarketing Agent determines the interest rate or Interest Period with respect to 2022C Subordinated Bonds in any Interest Rate Mode other than the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode shall be held to be unenforceable by a court of law of competent jurisdiction or (iii) other than with respect to 2022C Subordinated Bonds in the Direct Purchase Index Mode, the Index Mode or the Term Rate Mode, if the Remarketing Agent suspends its remarketing effort in accordance with the Remarketing Agreement. These provisions shall continue to apply until such time as the Remarketing Agent again makes such determinations. In the case of clause (ii) above, the Remarketing Agent shall again make such determination at such time as there is delivered to the Remarketing Agent and the District an opinion of Bond Counsel to the effect that there are no longer any legal prohibitions against such determinations. The following shall be the methods by which the interest rates and, in the case of the Flexible Rate Mode, the Interest Periods, shall be determined for 2022C Subordinated Bonds as to which any of the events described in clauses (i), (ii) or (iii) shall be applicable. Such methods shall be applicable from and after the date any of the events described in clauses (i), (ii) or (iii) first become applicable to such 2022C Subordinated Bonds until such time as the events described in clauses (i), (ii) or (iii) are no longer applicable to such 2022C Subordinated Bonds.

For Flexible Rate Bonds, the next Interest Period shall be from, and including, the first day following the last day of the current Interest Period for such Flexible Rate Bonds to, but excluding, the next succeeding Business Day and thereafter shall commence on each Business
Day and extend to, but exclude, the next succeeding Business Day. For each such Interest Period, the interest rate for such 2022C Subordinated Bonds shall be the applicable Alternate Rate in effect on the Business Day that begins an Interest Period.

For 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode, such 2022C Subordinated Bonds shall bear interest during each subsequent Interest Period at the Alternate Rate in effect on the first day of such Interest Period.

**Direct Purchase Index Rates.**

(a) During each Direct Purchase Index Rate Period, the 2022C Subordinated Bonds shall, subject to subparagraph (b) below, bear interest at the Direct Purchase Index Rate. The Calculation Agent shall determine the Direct Purchase Index Rate on each Direct Purchase Index Rate Determination Date occurring during any Direct Purchase Index Rate Period. The Direct Purchase Index Rate shall be the sum of (i) the product of the Direct Purchase Index multiplied by the Applicable Factor, plus (ii) the Applicable Spread. Each Direct Purchase Index Rate shall be effective, and interest shall accrue on the 2022C Subordinated Bonds at such Direct Purchase Index Rate each day during the applicable Direct Purchase Index Rate Effective Period. On or before any Conversion Date upon which a Direct Purchase Index Rate Period will begin, the District shall designate the Direct Purchase Index to be in effect during such Direct Purchase Index Rate Period. The Applicable Factor and Applicable Spread for a Direct Purchase Index Rate Period shall be determined by the Market Agent such that the applicable Direct Purchase Index Rate shall be the interest rate per annum (based upon tax exempt obligations comparable, in the judgment of the Market Agent, to the 2022C Subordinated Bonds and known to the Market Agent to have been priced or traded under the prevailing market conditions) to be the minimum interest rate at which a Person will agree to purchase the 2022C Subordinated Bonds on the Conversion Date at a price (without regard to accrued interest) equal to the principal amount thereof. Unless otherwise specified in the Continuing Covenant Agreement applicable to a Direct Purchase Index Rate Period, the Direct Purchase Index Rate shall be rounded to the nearest fifth decimal place. Promptly following the determination of the Direct Purchase Index Rate, the Calculation Agent shall give notice thereof to the District, the Trustee and the Paying Agent. If the Direct Purchase Index Rate is not determined by the Calculation Agent on the Direct Purchase Index Rate Determination Date, the rate of interest born on such 2022C Subordinated Bonds bearing interest at a Direct Purchase Index Rate shall be the rate in effect on the immediately preceding Direct Purchase Index Rate Reset Date until the Calculation Agent next determines the Direct Purchase Index Rate as required hereunder.

(b) **Adjustments to Direct Purchase Index Rates.**

(i) **Taxable Rate.** Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 78.02(b) thereof, but subject to Section 76.04(c) and Section 76.09(b)(ii) and (iii) thereof, from and after any Taxable Date, the interest rate on 2022C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the Taxable Rate.

(ii) **Default Rate.** Notwithstanding anything in the Subordinate Resolution to the contrary, including, without limitation, Section 78.02(b) thereof, but subject to
Section 76.04(c) and Section 76.09(b)(iii) thereof, from and after the effective date of any “Event of Default” under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution and during the continuance thereof, the interest rate for 2022C Subordinated Bonds in a Direct Purchase Index Mode shall be established at a rate at all times equal to the greater of (A) the Default Rate and (B) the interest rate that otherwise would be applicable to the 2022C Subordinated Bonds but for the provisions of this paragraph, payable on demand to the Bank. Interest shall accrue and be paid on both defaulted interest and defaulted principal.

(iii) Excess Interest. Notwithstanding anything in the Subordinate Resolution to the contrary, if during a Direct Purchase Index Mode the rate of interest on the 2022C Subordinated Bonds exceeds the Maximum Rate for such 2022C Subordinated Bonds, then (A) such 2022C Subordinated Bonds shall bear interest at the Maximum Rate and (B) interest on such 2022C Subordinated Bonds calculated at the rate equal to the difference between (1) the rate of interest for such 2022C Subordinated Bonds as otherwise calculated pursuant to the above provisions and (2) the Maximum Rate (the “Excess Interest”) shall be deferred until such date as the rate of interest borne by such 2022C Subordinated Bonds as otherwise calculated pursuant to the above provisions is below the Maximum Rate, at which time Excess Interest shall be payable with respect to such 2022C Subordinated Bonds. Payments of deferred Excess Interest shall no longer be due and payable upon the earlier to occur of the date on which such 2022C Subordinated Bonds are redeemed or tendered for purchase in accordance with the Thirteenth Supplemental Resolution and the redemption price or purchase price, as applicable, is paid in full or the principal of and interest on such 2022C Subordinated Bonds is otherwise paid in full.

(iv) Amortization Period. Notwithstanding anything in the Subordinate Resolution to the contrary, but subject to Section 76.04(c) and Section 76.09(b)(i), (ii) and (iii) thereof, during any Amortization Period, the 2022C Subordinated Bonds shall bear interest at the Bank Rate.

Index Rates. During each Index Rate Period, the 2022C Subordinated Bonds shall bear interest at the Index Rate. The Calculation Agent shall determine the Index Rate for each maturity of the 2022C Subordinated Bonds on each Index Rate Determination Date occurring during any Index Rate Period. The Index Rate for each maturity of the 2022C Subordinated Bonds shall be the sum of (i) the product of the Index multiplied by the Index Percentage, plus (ii) the Index Spread for such maturity of the 2022C Subordinated Bonds. Each Index Rate shall be effective, and interest shall accrue on the 2022C Subordinated Bonds at such Index Rate each day during the applicable Index Rate Effective Period. If the 2022C Subordinated Bonds are initially issued in the Index Mode, the District shall specify the Index, Index Percentage, Index Spreads and Call Protection Date for the Index Rate Period commencing on the date of issuance of the 2022C Subordinated Bonds and the length of the Index Rate Period commencing on the date of issuance of the 2022C Subordinated Bonds in the Sales Certificate. On or before any Conversion Date upon which an Index Rate Period will begin, the Corporation shall specify the length of such Index Rate Period and designate the Index and Call Protection Date to be in effect during such Index Rate Period and the Remarketing Agent shall determine the Index Percentage and Index Spread that would result in a sale of the 2022C Subordinated Bonds at a price (without
regard to accrued interest) equal to principal amount thereof on the Conversion Date for such
Index Rate Period. Each Index, Index Percentage and Index Spread shall be in effect through the
last day of the applicable Index Rate Period and shall be applied by the Calculation Agent in
determining the Index Rate on each Index Rate Determination Date during such Index Rate
Period. All percentages resulting from the calculation of the Index Rate shall be rounded, if
necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a
percentage point rounded upward. All dollar amounts used in or resulting from the calculation of
the Index Rate shall be rounded to the nearest cent with one-half cent being rounded upward.
The Calculation Agent shall make each Index Rate available by telephone or Electronic Means
after 5:00 p.m. on the applicable Index Rate Determination Date to any Notice Party requesting
such Index Rate. Upon request of any Notice Party, the Paying Agent shall give notice of such
rate by Electronic Means. If the Index Rate is not determined by the Calculation Agent on the
applicable Index Rate Determination Date, the rate of interest born on such 2022C Subordinated
Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding
Index Rate Reset Date until the Calculation Agent next determines the Index Rate as required
hereunder.

Optional Tenders of 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode.
Subject to Section 78.06, the Beneficial Owners of 2022C Subordinated Bonds in a Daily Mode
or a Weekly Mode may elect to have their 2022C Subordinated Bonds (or portions of those
2022C Subordinated Bonds, provided that no 2022C Subordinated Bonds remain Outstanding in
other than Authorized Denominations) purchased on any Business Day at a price equal to the
Purchase Price, upon delivery of a Tender Notice to the Trustee by the Tender Notice Deadline.
Immediately upon receipt of a Tender Notice, the Trustee shall notify the Remarketing Agent
and provide the Remarketing Agent with a copy of such Tender Notice.

Mandatory Purchase on Mandatory Purchase Date; Amortization Period During Direct
Purchase Index Mode. The 2022C Subordinated Bonds shall be subject to mandatory purchase
on each Mandatory Purchase Date. The Trustee shall give notice of such mandatory purchase by
mail to the Holders of the 2022C Subordinated Bonds subject to mandatory purchase no less than
ten (10) days prior to the Mandatory Purchase Date described in clauses (iii), (iv), (v), (viii) and
(x) of the definition of Mandatory Purchase Date and no less than 3 days prior to the Mandatory
Purchase Date described in clauses (vi) and (vii) of the definition of Mandatory Purchase Date
(provided that in the instance of a Mandatory Purchase Date resulting from clause (iii) of the
definition of Bank Purchase Date, no such notice shall be required). No notice shall be given of
the Mandatory Purchase Date at the end of each Interest Period for Flexible Rate Bonds. Any
notice shall state the Mandatory Purchase Date, the Purchase Price, and that interest on 2022C
Subordinated Bonds subject to mandatory purchase shall cease to accrue from and after the
Mandatory Purchase Date. The failure to mail such notice with respect to any 2022C
Subordinated Bond shall not affect the validity of the mandatory purchase of any other 2022C
Subordinated Bond with respect to which notice was so mailed. Any notice mailed will be
conclusively presumed to have been given, whether or not actually received by any Holder or
Beneficial Owner. The Trustee shall also give a copy of such notice to the Rating Agencies.

The term “Mandatory Purchase Date” means: (i) with respect to a Flexible Rate Bond,
the first Business Day following the last day of each Flexible Rate Period with respect to such
Flexible Rate Bond, (ii) with respect to 2022C Subordinated Bonds in the Term Rate Mode, the
first Business Day following the last day of each Term Rate Period applicable to such 2022C Subordinated Bonds, (iii) with respect to any 2022C Subordinated Bonds, any Conversion Date applicable to such 2022C Subordinated Bond or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date specified in Section 76.11 not failed to occur, (iv) with respect to any 2022C Subordinated Bonds, any Substitution Date with respect to a Credit Enhancement or Liquidity Facility, (v) with respect to any 2022C Subordinated Bonds, the fifth Business Day prior to the Expiration Date with respect to a Credit Enhancement or Liquidity Facility securing such 2022C Subordinated Bonds, (vi) with respect to any 2022C Subordinated Bonds, the date specified by the Trustee following the occurrence of an event under the Reimbursement Agreement which requires or gives the Credit Provider or Liquidity Provider the option to cause a mandatory tender of the 2022C Subordinated Bonds or terminate the Credit Enhancement or Liquidity Facility upon notice, which date shall be a Business Day not more than five Business Days after the Trustee’s receipt of written notice of such event from the Credit Provider or the Liquidity Provider and directing the Trustee to cause a mandatory tender of the 2022C Subordinated Bonds and in no event later than the day preceding the termination date specified by the Credit Provider or the Liquidity Provider; (vii) with respect to any 2022C Subordinated Bonds, the date specified by the Trustee following receipt of written notice by the Trustee from the Credit Provider that the Credit Enhancement will not be reinstated following a drawing to pay interest on the 2022C Subordinated Bonds (other than interest on 2022C Subordinated Bonds no longer Outstanding after such drawing) and directing the Trustee to cause a mandatory tender of the 2022C Subordinated Bonds which date shall be a Business Day not more than five days after the Trustee’s receipt of such notice, (viii) with respect to 2022C Subordinated Bonds in the Daily Mode or Weekly Mode, any Business Day specified by the District with the consent of the Liquidity Provider, if any, not less than 20 days after the Trustee’s receipt of such notice and in no event later than the day preceding the Expiration Date of the Liquidity Facility, if any, then in effect with respect to such 2022C Subordinated Bonds, (ix) with respect to 2022C Subordinated Bonds in the Index Mode, the first Business Day following the last day of each Index Rate Period applicable to such 2022C Subordinated Bonds, and (x) with respect to 2022C Subordinated Bonds in the Direct Purchase Index Mode, each Bank Purchase Date; provided that, in the event that the Bank (acting in its sole and absolute discretion) for the then existing Direct Purchase Index Rate Period agrees in writing to a new Direct Purchase Index Rate Period, the provisions of this clause (x) shall apply and be interpreted by substituting the Bank Purchase Date for the new Direct Purchase Index Rate Period for the then-current Bank Purchase Date.

Notwithstanding the above paragraphs and anything to the contrary in the Thirteenth Supplemental Resolution, in the event the 2022C Subordinated Bonds in the Direct Purchase Index Mode are not purchased or remarketed on a Bank Purchase Date and the conditions precedent to any Amortization Period set forth in the Continuing Covenant Agreement, if any, are satisfied (and if no such conditions precedent are set forth in the Continuing Covenant Agreement, then on the condition that no Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), then the 2022C Subordinated Bonds shall be subject to special mandatory redemption on the following terms: (i) the 2022C Subordinated Bonds shall bear interest at the Bank Rate, unless an Event of Default under and as defined in the Continuing Covenant Agreement or the Subordinate Master Resolution has occurred and is continuing), in which case the 2022C Subordinated Bonds shall bear interest at the Default Rate, (ii) interest on the 2022C
Subordinated Bonds shall be payable on each Amortization Interest Payment Date, and (iii) the principal of the 2022C Subordinated Bonds shall be payable on each Amortization Principal Payment Date as provided in the Continuing Covenant Agreement. Notwithstanding anything herein to the contrary, during the Amortization Period, the 2022C Subordinated Bonds may be subject to redemption or purchase at the sole option of the District at any time without notice as and to the extent provided in the Continuing Covenant Agreement.

Optional Redemption of Flexible Rate Bonds. 2022C Subordinated Bonds in the Flexible Mode are not subject to optional redemption prior to their respective Purchase Dates. 2022C Subordinated Bonds in the Flexible Mode shall be subject to redemption at the option of the District in whole or in part on their respective Purchase Dates at a Redemption Price equal to the principal amount thereof.

Optional Redemption of 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode. 2022C Subordinated Bonds in the Daily Mode or the Weekly Mode are subject to optional redemption by the District, in whole or in part (provided that no 2022C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any Business Day, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Optional Redemption of 2022C Subordinated Bonds in the Term Rate Mode, Index Mode or Fixed Rate Mode.

2022C Subordinated Bonds in the Term Rate Mode or the Index Mode shall be subject to redemption, in whole or in part (provided that no 2022C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations), on any date on or after the Call Protection Date for each Term Rate Period or Index Rate Period applicable to the 2022C Subordinated Bonds in the Term Rate Mode or Index Mode, at the option of the District at a Redemption Price equal to the principal amount, or portions thereof, of the 2022C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

2022C Subordinated Bonds in the Term Rate Mode or Fixed Rate Mode with a Term Rate Period or Fixed Rate Period of greater than or equal to ten years are subject to redemption in whole or in part on any date on or after the tenth anniversary of the commencement of the Term Rate Period or Fixed Rate Period (and if in part, in such order of maturity as the District shall specify and within a maturity by lot in any manner which the Trustee deems fair) at a Redemption Price equal to the principal amount, or portions thereof, of the 2022C Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

The District, in connection with a change to a Long-Term Mode, may waive or otherwise alter its rights to direct the redemption of any such 2022C Subordinated Bonds so changed to a Long-Term Mode; provided that notice describing the waiver or alteration shall be submitted to the Trustee, together with a Favorable Opinion of Bond Counsel, addressed to it.

Unless a Credit Provider Failure has occurred and is continuing, if a Credit Enhancement is then in effect and the Redemption Price includes any premium, the right of the District to direct an optional redemption of 2022C Subordinated Bonds in a Long-Term Mode is subject to
the condition that the Trustee has received, prior to the date on which notice of redemption is required to be given to Owners, either Available Moneys or written confirmation from the Credit Provider that it can draw under the Credit Enhancement on the proposed redemption date in an aggregate amount sufficient to cover the principal of and premium and interest due on the Redemption Date.

Optional and Mandatory Redemption of 2022C Subordinated Bonds in the Direct Purchase Index Mode.

Subject to any limitations, conditions or requirements set forth in the applicable Continuing Covenant Agreement, 2022C Subordinated Bonds in the Direct Purchase Index Mode are subject to optional redemption by the District, in whole or in part (provided that no 2022C Subordinated Bonds shall remain Outstanding in other than Authorized Denominations) on any date, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

2022C Subordinated Bonds in the Direct Purchase Index Mode are subject to mandatory redemption on the dates, in the amounts and in the manner set forth in the applicable Continuing Covenant Agreement, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the Redemption Date.

Mandatory Sinking Fund Account Redemption of 2022C Subordinated Bonds. The 2022C Subordinated Bonds [maturing on August 15, 20[____.]] shall be subject to redemption prior to maturity from mandatory sinking fund account payments for such 2022C Subordinated Bonds on August 15 of each year on and after August 15, 20____, at a Redemption Price equal to the principal amount of such 2022C Subordinated Bonds, or portions thereof, to be redeemed, plus accrued interest, if any, to the Redemption Date, without premium. The following shall be the mandatory sinking fund account payments for the 2022C Subordinated Bonds [maturing on August 15, 20[____.]]. Such mandatory sinking fund account payments shall be due on August 15 of the years set forth in the following table in the respective amounts set forth opposite such years in said table:
Notice of Redemption. Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty (20) days (ten (10) days in the case of 2022C Subordinated Bonds in the Daily Mode, Weekly Mode, Direct Purchase Index Mode or Flexible Mode) nor more than sixty (60) days prior to the redemption date, to the Holder of any 2022C Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2022C Subordinated Bonds; provided that no notice of redemption shall be required for mandatory redemptions of the 2022C Subordinated Bonds in the Direct Purchase Index Mode. Each notice of redemption shall state the redemption date, the place of redemption and the principal amount of the 2022C Subordinated Bonds to be redeemed, and shall also state that the interest on the 2022C Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2022C Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the redemption date to pay the Redemption Price of the 2022C Subordinated Bonds to be redeemed. Any notice of optional redemption may be rescind by written notice given to the Trustee by the District no later than two Business Days prior to the date specified for redemption. Notwithstanding the foregoing, notice of redemption shall not be required for 2022C Subordinated Bonds redeemed on a Mandatory Purchase Date.

This 2022C Subordinated Bond is transferable by the registered owner hereof, in person or by the attorney of such owner duly authorized in writing, at the principal office of the Trustee but only in the manner, subject to the limitations and upon payment of the charges provided in the Subordinate Resolution, and upon surrender and cancellation of this 2022C Subordinated Bond. Upon such transfer a new fully registered Bond or Subordinated Bonds without coupons, of authorized denomination or denominations, for the same aggregate principal amount and maturity will be issued to the transferee in exchange herefor.
The District and the Trustee may deem and treat the registered owner hereof as the absolute owner hereof for all purposes, and the District and the Trustee shall not be affected by any notice to the contrary.

The rights and obligations of the District and of the holders and registered owners of the Subordinated Bonds may be modified or amended at any time in the manner, to the extent, and upon the terms provided in the Subordinate Resolution, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce the amount of any premium payable upon the redemption thereof, without the consent of the holder of each Subordinated Bond so affected, or (ii) reduce the percentage of Subordinated Bonds required for the affirmative vote or written consent to an amendment or modification, without the consent of the holders of all the Subordinated Bonds then outstanding, or (iii) without its written consent thereto, modify any of the rights or obligations of the Trustee.

It is hereby certified and recited that any and all acts, conditions and things required to exist, to happen and to be performed, precedent to and in the incurring of the indebtedness evidenced by this 2022C Subordinated Bond, and in the issuing of this 2022C Subordinated Bond, do exist, have happened and have been performed in due time, form and manner, as required by the Constitution and statutes of the State of California, and that this 2022C Subordinated Bond, together with all other indebtedness of the District pertaining to the Electric System, is within every debt and other limit prescribed by the Constitution and the statutes of the State of California, and is not in excess of the amount of Subordinated Bonds permitted to be issued under the Subordinate Resolution.

This 2022C Subordinated Bond shall not be entitled to any benefit under the Subordinate Resolution, or become valid or obligatory for any purpose, until the certificate of authentication hereon endorsed shall have been signed by the Trustee. To the extent of any conflict or inconsistency between any provisions contained in this 2022C Subordinated Bond and the Subordinate Resolution, the provisions of the Subordinate Resolution shall control.
IN WITNESS WHEREOF, SACRAMENTO MUNICIPAL UTILITY DISTRICT has
caus ed this 2022C Subordinated Bond to be executed in its name and on its behalf by the
facsimile signature of its President of its Board of Directors and by the facsimile signature of its
Treasurer and countersigned by the facsimile signature of its Secretary, and the seal of the
District to be reproduced hereon, by facsimile and this 2022C Subordinated Bond to be dated as
of the date first written above.

SACRAMENTO MUNICIPAL UTILITY
DISTRICT

By______________________________
President of the Board of Directors

By______________________________
Treasurer of the District

(SEAL)

Countersigned:

______________________________
Secretary of the District
CERTIFICATE OF AUTHENTICATION AND REGISTRATION

This is one of the Subordinated Bonds described in the within-mentioned Subordinate Resolution and registered on the date set forth below.

Dated: _______, 2022

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
    as Trustee

By____________________________________
        Authorized Officer
ASSIGNMENT

For value received _____________________ hereby sell, assign and transfer unto __________________ whose taxpayer identification number is ________________ the within-mentioned Bond and hereby irrevocably constitute and appoint ________________ attorney, to transfer the same on the books of the District at the office of the Trustee, with full power of substitution in the premises.

________________________________________
NOTE: The signature to this Assignment must correspond with the name on the face of the within Registered Bond in every particular, without alteration or enlargement or any change whatsoever.

Dated:

Signature Guaranteed by:

________________________________________
NOTE: Signature must be guaranteed by an eligible guarantor institution
EXHIBIT B

FORM OF REVOLVING NOTE

SACRAMENTO MUNICIPAL UTILITY DISTRICT
SUBORDINATED ELECTRIC REVENUE REFUNDING BONDS
2022 SERIES C

[Delivery Date] $_______

The Sacramento Municipal Utility District (the “District”), for value received, hereby promises to pay to the order of [Bank] (the “Bank”), pursuant to that certain Reimbursement Agreement dated as of _______ (the “Agreement”), between the District and the Bank, at the office of the Bank at __________________, the aggregate unpaid principal amount of all Reimbursement Obligations (as defined in the Agreement) pursuant to the Agreement on the dates and in the amounts provided for in the Agreement.

The District promises to pay interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. All payments of principal and interest shall be made in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts in immediately available funds. All capitalized terms used herein and not otherwise defined herein shall have the meanings specified in the Agreement.

This Revolving Note is a Revolving Note as referred to in Section 80.12 of Resolution No. 01-06-10 of the District adopted June 21, 2001, amending and restating Resolution No. 85-11-1 of the District adopted November 7, 1985, as amended and supplemented, including as supplemented by Resolution No. _____ of the District adopted May 19, 2022 (the “Thirteenth Supplemental Resolution”) (collectively, the “Subordinate Master Resolution”). This Revolving Note evidences the Reimbursement Obligations owed to the Bank by the District pursuant to the Agreement which have been designated by the District as, and constitute, Parity Subordinated Debt under and as defined in the Subordinate Master Resolution and, as such Parity Subordinated Debt, is entitled to the benefits afforded Parity Subordinated Debt and the holders thereof pursuant to the Subordinate Master Resolution and is secured by a lien on the Net Subordinated Revenues as more fully set forth in and subject to the terms of the Subordinate Master Resolution. As provided in the Agreement, the Reimbursement Obligations and this Revolving Note are subject to prepayment, in whole or in part, in accordance with the terms of the Agreement.

The Bank agrees, by acceptance of this Revolving Note, that it will make a notation on the schedule attached hereto of all Reimbursement Obligations evidenced hereby and all principal payments and prepayments made hereunder and of the date to which interest hereon has been paid, all as provided in the Agreement; provided, however, that the failure to make any such notation or any error in such notation shall not limit or otherwise affect the obligation of the District hereunder with respect to payments of principal of and interest on this Revolving Note.

B-1
This Revolving Note is authorized by the District to be issued to provide for the payment of the principal of and interest on the unpaid principal amount of all Reimbursement Obligations owed to the Bank under the Agreement on the dates and at the rate or rates provided for in the Agreement. This Revolving Note is issued under and pursuant to and in full compliance with the Subordinate Master Resolution and the Thirteenth Supplemental Resolution.

It is hereby certified that all conditions, acts and things essential to the validity of this Revolving Note exist, have happened and have been done and that every requirement of law affecting the issuance hereof has been duly complied with.

IN WITNESS WHEREOF, SMUD, has caused this Revolving Note to be executed by an authorized officer of SMUD and this Revolving Note to be dated as of date set forth above.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By ______________________________
Name: ______________________________
Title: ______________________________
## Schedule for Revolving Note

**Dated ________**

**By Sacramento Municipal Utility District**

**Payable to [Bank]**

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount of Drawing or Advance Made</th>
<th>Amount of Principal Paid</th>
<th>Date to Which Interest Paid</th>
<th>Due Date</th>
<th>Notation Made by</th>
</tr>
</thead>
</table>

B-3
RESOLUTION NO. _________ OF
THE BOARD OF DIRECTORS OF
SACRAMENTO MUNICIPAL UTILITY DISTRICT
AUTHORIZING THE EXECUTION AND DELIVERY OF ONE OR MORE
CONTRACTS OF PURCHASE, OFFICIAL STATEMENTS AND CONTINUING
DISCLOSURE AGREEMENTS, DISTRIBUTION OF OFFICIAL STATEMENTS, AND
CERTAIN OTHER ACTIONS RELATING TO THE ISSUANCE AND SALE OF ONE
OR MORE SERIES OR SUBSERIES OF THE DISTRICT'S ELECTRIC REVENUE
BONDS AND/OR SUBORDINATED ELECTRIC REVENUE BONDS, THE
REFUNDING OF ALL OR A PORTION OF ONE OR MORE SERIES OF THE
DISTRICT'S ELECTRIC REVENUE BONDS, THE TERMINATION OF ONE OR
MORE INTEREST RATE SWAP AGREEMENTS AND CERTAIN OTHER MATTERS
RELATING THERETO

BE IT RESOLVED, by the Board of Directors of the Sacramento Municipal Utility District (the “District”), as follows:

Section 1. Sale of Bonds. The District’s Electric Revenue Refunding Bonds, 2022 Series J and/or Subordinated Electric Revenue Refunding Bonds, 2022 Series C (collectively, the “Bonds”), each in one or more subseries, shall be sold to the underwriters thereof in one or more negotiated sales at the prices and otherwise upon the terms and conditions determined on the sale dates thereof by the Chief Executive Officer and General Manager, any Member of the Executive Committee, the Treasurer, the Secretary or the Chief Financial Officer or the designee of any such officer (each an “Authorized Officer”), as specified in one or more Sales Certificates relating to the Bonds (the “Sales Certificates”) authorized under the supplemental resolutions authorizing the issuance of the Bonds adopted by the Board of Directors of the District on the date hereof.

Section 2. Contracts of Purchase. The forms of Contracts of Purchase with respect to the Bonds (the “Contracts of Purchase”) between the District and the underwriters named therein (the “Underwriters”), in the forms submitted to this meeting are hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver one or more Contracts of Purchase in substantially such forms for the Bonds or any series or subseries thereof on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District’s counsel (such approval to be conclusively evidenced by the execution of such Contracts of Purchase).

Section 3. Official Statements. The Official Statements of the District relating to the Bonds (the “Official Statements”) in substantially the forms submitted to this meeting are hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver the Official Statements relating to the Bonds in substantially such forms on behalf of the District, subject to such additions thereto and changes therein (including any changes to reflect that all or a portion of the Bonds will be issued initially in an interest rate mode other than the index mode) as any Authorized Officer shall approve after consultation with
the District’s counsel and subject to such further changes as may be consistent with the Sales Certificates (such approval to be conclusively evidenced by the execution of such Official Statements). The Underwriters are authorized to distribute the Official Statements in preliminary form to persons who may be interested in the purchase of the Bonds and the Official Statements in final form to purchasers of the Bonds.

Section 4. Continuing Disclosure Agreements. The forms of Continuing Disclosure Agreements relating to the Bonds between the District and U.S. Bank Trust Company, National Association, as dissemination agent (the “Continuing Disclosure Agreements”) in the forms attached to the Official Statements submitted to this meeting are hereby approved. Any Authorized Officer, acting alone, is authorized and directed to execute and deliver the Continuing Disclosure Agreements in substantially such forms on behalf of the District, subject to such additions thereto and changes therein as any Authorized Officer shall approve after consultation with the District’s counsel (such approval to be conclusively evidenced by the execution of such Continuing Disclosure Agreements).

Section 5. Bond Insurance. Any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to procure bond insurance for all or any portion of the Bonds including without limitation one or more commitments for a bond insurance policy and one or more insurance agreements; provided that such insurance and such agreements and documents are determined by any Authorized Officer to be reasonable under the circumstances and to be consistent with the provisions and intent of this resolution. The power to make such determination is hereby delegated to each Authorized Officer and shall be conclusively evidenced by the execution and delivery of the insurance agreements and insurance commitments. Any actions heretofore taken by any Authorized Officer in furtherance of this Section are hereby ratified, confirmed and approved.

Section 6. Termination of Interest Rate Swap Agreement. The District previously entered into an interest rate swap agreement (the “Interest Rate Swap”) to hedge potential interest rate exposure relating to the refunding of its Electric Revenue Bonds anticipated to be refunded by the Bonds (the “Refunded Bonds”). Any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to terminate all or a portion of the Interest Rate Swap in connection with the issuance of the Bonds and the refunding of the Refunded Bonds. In the event that the Interest Rate Swap is terminated on the condition that the issuance of the Bonds has occurred (or will occur simultaneously with the settlement of the Interest Rate Swap termination) and/or the Refunded Bonds have been refunded (or will be refunded simultaneously with the settlement of the Interest Rate Swap termination) and such issuance and/or refunding does not occur, then any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to reinstate all or a portion of the terminated Interest Rate Swap; this authorization shall include, but not be limited to, adjusting any fixed rate specified in, and making other changes to the terms of, the Interest Rate Swap in connection with the reinstatement of all or a portion of the terminated Interest Rate Swap.
In the event that all or a portion of the Interest Rate Swap is reinstated and/or adjusted as described above, the Board of Directors of the District hereby finds and determines, pursuant to Section 5922 of the California Government Code, that due consideration has been given for the creditworthiness of the counterparty to such Interest Rate Swap, including any related guarantee of, or other credit support for, the obligations of such counterparty, if applicable, and that the Interest Rate Swap is designed to reduce the amount or duration of rate, spread or similar risk or result in a lower cost of borrowing when used in combination with the issuance of the Bonds, the Refunded Bonds, and/or one or more series of other revenue bonds to be issued by the District in the future for the purpose of refunding all or a portion of the Refunded Bonds. To the extent that the Interest Rate Swap so reinstated and/or adjusted as described above is inconsistent or in conflict with the District’s Resolution No. 99-12-14, adopted on December 16, 1999 (the “Swap Policy”) or any other swap policies of the District, the inconsistent or conflicting provisions of the Swap Policy or such other swap policies of the District are hereby waived and shall not be applicable to the Interest Rate Swap reinstated and/or adjusted as described above.

Section 7. Credit Facilities and/or Liquidity Facilities. Any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to procure a letter of credit, insurance policy, line of credit, surety bond, standby purchase agreement or other security instrument or liquidity instrument providing for or securing the payment of the principal of and interest on all or any portion of the Bonds and/or providing for the payment of the purchase price of tendered Bonds, including without limitation one or more reimbursement agreements, standby purchase agreements, or other credit or liquidity provider agreements and any term sheets, fee letters or fee agreements therefor; provided that such credit facilities and/or liquidity facilities and such agreements and documents are determined by any Authorized Officer to be reasonable under the circumstances and to be consistent with the provisions and intent of this resolution. The power to make such determination is hereby delegated to each Authorized Officer and shall be conclusively evidenced by the execution and delivery of such agreements, term sheets, fee letters and/or fee agreements. Any actions heretofore taken by any Authorized Officer in furtherance of this Section are hereby ratified, confirmed and approved.

Section 8. Remarketing Agents and Remarketing Agreements. Any Authorized Officer, acting alone, is hereby authorized to do any and all things and to negotiate, execute, deliver, and perform any and all agreements and documents which they deem necessary or advisable in order to appoint one or more remarketing agents for all or any portion of the Bonds, including without limitation one or more remarketing agreements; provided that such agreements and documents are determined by any Authorized Officer to be reasonable under the circumstances and to be consistent with the provisions and intent of this resolution. The power to make such determination is hereby delegated to each Authorized Officer and shall be conclusively evidenced by the execution and delivery of such agreements. Any actions heretofore taken by any Authorized Officer in furtherance of this Section are hereby ratified, confirmed and approved.

Section 9. Other Related Actions. The Authorized Officers and other officers of the District are hereby authorized and directed to do any and all things and to negotiate, execute, deliver and perform any and all agreements and documents (including one or more
escrow agreements for the purpose of refunding outstanding bonds) which they deem necessary or advisable in order to consummate the issuance, sale and delivery of the Bonds, to provide for credit enhancement of, or liquidity for, the Bonds, and to effectuate the purposes of this resolution and the transactions contemplated hereby and that any actions heretofore taken and any agreements and documents heretofore executed and delivered by the officers of the District to consummate the issuance, sale and delivery of the Bonds, to provide for credit enhancement of, or liquidity for, the Bonds, and to effect the purpose of these resolutions and the transactions contemplated thereby are hereby ratified and confirmed.
NEW ISSUE - FULL BOOK-ENTRY

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD, based upon an analysis of existing laws, regulations, rulings and court decisions and, assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2022 Series J Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Bond Counsel, interest on the 2022 Series J Bonds is not a specific preference item for purposes of the federal alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2022 Series J Bonds. See “TAX MATTERS.”

S[PRINCIPAL AMOUNT]*
ELECTRIC REVENUE REFUNDING BONDS, 2022 SERIES J

Dated: Date of Delivery
Due: August 15, as shown on the inside cover

The Electric Revenue Refunding Bonds, 2022 Series J (the “2022 Series J Bonds”) will be issued pursuant to the provisions of Resolution No. 6649 of the Sacramento Municipal Utility District (“SMUD”), as amended and supplemented, and will be payable from the Net Revenues of the Electric System of SMUD, as described herein. The 2022 Series J Bonds are being issued to (i) refund certain of SMUD’s outstanding Bonds (as defined herein) and (ii) pay certain costs associated with the issuance of the 2022 Series J Bonds. See “PLAN OF FINANCE.”

The 2022 Series J Bonds will mature in the years and amounts as shown on the inside cover. Interest on the 2022 Series J Bonds will accrue at the rates set forth on the inside cover and be payable on February 15, 2023, and semiannually thereafter on each February 15 and August 15.

The 2022 Series J Bonds are not subject to redemption prior to maturity.

The 2022 Series J Bonds will be issued in fully registered form and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository (the “Securities Depository”) for the 2022 Series J Bonds. Individual purchases of interests in the 2022 Series J Bonds may be made in book-entry form only, in the principal amount of $5,000 or any integral multiple thereof. Purchasers of such interests will not receive certificates representing their interests in the 2022 Series J Bonds. Principal and interest are payable directly to the Securities Depository by U.S. Bank Trust Company, National Association, Trustee and Paying Agent. Upon receipt of payments of principal and interest, the Securities Depository will in turn remit such principal and interest to the Securities Depository’s Direct Participants (as such term is herein defined) for subsequent disbursement to the purchasers of interests in the 2022 Series J Bonds, as described herein. See APPENDIX C – “BOOK-ENTRY SYSTEM.”

The principal of and interest on the 2022 Series J Bonds, together with the debt service on other Parity Bonds (as defined herein), are payable exclusively from and secured by a pledge of the Net Revenues of the Electric System of SMUD. Neither the credit nor the taxing power of SMUD or the State of California is pledged to the payment of the 2022 Series J Bonds.

The information presented on this cover page is for general reference only and is qualified in its entirety by reference to the entire Official Statement and the documents summarized and described herein.
The 2022 Series J Bonds are offered when, as and if issued and received by the Underwriters, subject to the approval of the validity of the 2022 Series J Bonds and certain other legal matters by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. Certain legal matters will be passed on for the Underwriters by their counsel, Nixon Peabody LLP, San Francisco, California. It is expected that the 2022 Series J Bonds will be available for delivery through the facilities of DTC on or about ______, 2022.

Morgan Stanley

BofA Securities

Barclays

Citigroup

Goldman Sachs & Co. LLC

J.P. Morgan

_______, 2022

* Preliminary, subject to change.
**SACRAMENTO MUNICIPAL UTILITY DISTRICT**  
Sacramento, California  

**ELECTRIC REVENUE REFUNDING BONDS, 2022 SERIES J**

**MATURITY SCHEDULE**

<table>
<thead>
<tr>
<th>Due</th>
<th>Amount</th>
<th>Interest Rate</th>
<th>Yield</th>
<th>CUSIP†</th>
</tr>
</thead>
<tbody>
<tr>
<td>(August 15)</td>
<td>$</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
</tbody>
</table>

* Preliminary, subject to change.
† CUSIP® is a registered trademark of the American Bankers Association. CUSIP® data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers have been assigned by an independent company not affiliated with SMUD or the Underwriters and are included solely for the convenience of the registered owners of the applicable 2022 Series J Bonds. Neither SMUD nor the Underwriters are responsible for the selection or uses of these CUSIP® numbers, and no representation is made as to their correctness on the applicable 2022 Series J Bonds or as included herein. The CUSIP® number for a specific maturity is subject to being changed after the execution and delivery of the 2022 Series J Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the 2022 Series J Bonds.

4137-6863-2887.4
SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Brandon Rose, President
Heidi Sanborn, Vice President
Nancy Bui-Thompson
Gregg Fishman
Rosanna Herber
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Interim Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Frankie McDermott, Chief Operating Officer
Lora Anguay, Chief Zero Carbon Officer
Jennifer Davidson, Chief Financial Officer
Farres Everly, Director, Communications, Marketing and Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

SPECIAL SERVICES

ORRICK, HERRINGTON & SUTCLIFFE LLP
Bond Counsel

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION
Trustee and Paying Agent

BAKER TILLY VIRCHOW KRAUSE, LLP, Madison, Wisconsin
Independent Accountants

PFM FINANCIAL ADVISORS LLC, Philadelphia, Pennsylvania
Municipal Advisor

SWAP FINANCIAL GROUP, LLC
Swap Advisor

[________]
Verification Agent

1 The previous Chief Diversity Officer, Gary King, retired as of March 31, 2022. The Chief Diversity Officer position is currently being filled on a rotational interim basis. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – INTRODUCTION – Independent Governance – Chief Diversity Officer.”
No dealer, broker, salesperson or other person has been authorized by SMUD or the Underwriters to give any information or to make any representations with respect to the 2022 Series J Bonds other than those contained in this Official Statement and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2022 Series J Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from SMUD and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of, the Underwriters. The information and expressions of opinion stated herein are subject to change without notice. The delivery of this Official Statement shall not, under any circumstances, create any implication that there has been no change in the affairs of SMUD since the date hereof. The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The 2022 Series J Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption from the registration requirements contained in such Act. The 2022 Series J Bonds have not been registered or qualified under the securities laws of any state.

IN CONNECTION WITH THE OFFERING OF THE 2022 SERIES J BONDS THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OF SUCH BONDS AT LEVELS ABOVE THOSE THAT MIGHT OTHERWISE PREVAIL ON THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITERS MAY OFFER AND SELL THE 2022 SERIES J BONDS TO CERTAIN DEALERS AND OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES SET FORTH ON THE INSIDE COVER PAGE HEREOF AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute “forward-looking statements.” Such statements generally are identifiable by the terminology used, such as “plan,” “expect,” “estimate,” “budget” or other similar words.

The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. SMUD does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access website. SMUD maintains a website. However, the information presented therein is not part of this Official Statement and should not be relied upon in making investment decisions with respect to the 2022 Series J Bonds. The references to internet websites in this Official Statement are shown for reference and convenience only; unless explicitly stated to the contrary, the information contained within the websites is not incorporated herein by reference and does not constitute part of this Official Statement.
# TABLE OF CONTENTS

INTRODUCTION ......................................................................................................................... 1  
PLAN OF FINANCE........................................................................................................................ 3  
ESTIMATED SOURCES AND USES OF FUNDS ........................................................................... 4  
THE 2022 SERIES J BONDS ........................................................................................................... 4  
DEBT SERVICE SCHEDULE .......................................................................................................... 4  
SECURITY FOR THE BONDS ........................................................................................................ 5  
General ....................................................................................................................................... 5  
Consent to Amendments to the Resolution .................................................................................. 5  
Allocation of Revenues .................................................................................................................. 5  
Rates and Charges ....................................................................................................................... 7  
Limitations on Additional Obligations Payable from Revenues .................................................. 8  
SACRAMENTO MUNICIPAL UTILITY DISTRICT ....................................................................... 9  
ABSENCE OF LITIGATION REGARDING THE 2022 SERIES J BONDS ............................... 9  
UNDERWRITING ......................................................................................................................... 10  
MUNICIPAL ADVISOR .................................................................................................................. 11  
SWAP ADVISOR ........................................................................................................................ 11  
APPROVAL OF LEGAL PROCEEDINGS ...................................................................................... 11  
FINANCIAL STATEMENTS ......................................................................................................... 11  
TAX MATTERS .............................................................................................................................. 11  
CONTINUING DISCLOSURE UNDERTAKING ............................................................................ 14  
RATINGS ..................................................................................................................................... 14  
VERIFICATION ............................................................................................................................ 14  
MISCELLANEOUS ....................................................................................................................... 15  
APPENDIX A INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT .................................................................................................................... A-1  
APPENDIX B 2020 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS AND REPORT OF INDEPENDENT ACCOUNTANTS .................................................................................... B-1  
APPENDIX C BOOK-ENTRY SYSTEM ......................................................................................... C-1  
APPENDIX D SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION ................. D-1  
APPENDIX E PROPOSED FORM OF LEGAL OPINION FOR 2022 SERIES J BONDS .............. E-1  
APPENDIX F FORM OF CONTINUING DISCLOSURE AGREEMENT ....................................... F-1
OFFICIAL STATEMENT
RELATING TO
SACRAMENTO MUNICIPAL UTILITY DISTRICT
$[PRINCIPAL AMOUNT]*
ELECTRIC REVENUE REFUNDING BONDS, 2022 SERIES J

INTRODUCTION

This Official Statement, including the cover page and Appendices attached hereto, describes the Sacramento Municipal Utility District ("SMUD"), a political subdivision of the State of California (the "State"), and its $[PRINCIPAL AMOUNT]* Electric Revenue Refunding Bonds, 2022 Series J (the “2022 Series J Bonds”), in connection with the sale by SMUD of the 2022 Series J Bonds. The 2022 Series J Bonds are being issued to (i) refund certain of SMUD’s outstanding Bonds (as defined herein) (the “Refunded Bonds”) and (ii) pay certain costs associated with the issuance of the 2022 Series J Bonds. See “PLAN OF FINANCE.”

The 2022 Series J Bonds are part of an Electric Revenue Bond authorization of SMUD and are issued pursuant to Resolution No. 6649 (the “Master Resolution”) adopted in 1971, as amended and supplemented, and applicable California law, including Article 6a of Chapter 6 of the Municipal Utility District Act (Public Utilities Code Sections 12850 to 12860) (the “Act”), and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Government Code Section 53580 et seq.). The issuance of the 2022 Series J Bonds was authorized on May 19, 2022, by the Board of Directors of SMUD by a Sixty-Fifth Supplemental Resolution (the “Sixty-Fifth Supplemental Resolution”) supplemental to the Master Resolution. The Master Resolution and all supplemental resolutions, including the Sixty-Fifth Supplemental Resolution, are collectively referred to herein as the “Resolution.” See APPENDIX D — “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION.”

The purchasers of the 2022 Series J Bonds, by virtue of their purchase of the 2022 Series J Bonds, will consent to certain amendments to the Resolution. See “SECURITY FOR THE BONDS – Consent to Amendments to the Resolution.”

The 2022 Series J Bonds and other bonds issued on a parity therewith pursuant to the Resolution are collectively referred to herein as the “Bonds.” The Bonds, together with other Parity Bonds, are payable solely from the Net Revenues of the Electric System. See “SECURITY FOR THE BONDS.” As of May 1, 2022, Bonds in the aggregate principal amount of $1,966,925,000 were outstanding under the Resolution. Immediately following the issuance of the 2022 Series J Bonds and the refunding of the Refunded Bonds, Bonds in the aggregate principal amount of $[_______]* will be outstanding under the Resolution.

Although the Resolution establishes an “Electric Revenue Bond Reserve Fund” (the “Reserve Fund”), the Reserve Fund does not secure and will not be available to pay debt service on the 2022 Series J Bonds. The Reserve Fund secures all Bonds issued prior to January 1, 2004 that are currently outstanding (and not otherwise deemed to be paid and discharged under the Resolution) and may secure additional Bonds issued in the future.

* Preliminary, subject to change.
U.S. Bank Trust Company, National Association serves as trustee and paying agent under the Resolution (the “Trustee”).

From time to time, SMUD issues Subordinated Electric Revenue Bonds (the “Subordinated Bonds”) pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the “Subordinate Resolution”). As of May 1, 2022, Subordinated Bonds in the aggregate principal amount of $200,000,000 were outstanding. The Subordinated Bonds are payable solely from the Net Subordinated Revenues of the Electric System and are subordinate in right of payment to the prior payment of principal of and interest on the Bonds (including the 2022 Series J Bonds).

SMUD also issues commercial paper notes (the “Notes”) from time to time. As of May 1, 2022, no Notes were outstanding. Currently, Notes in the aggregate principal amount of $300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD’s obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Bonds (including the 2022 Series J Bonds) and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the “Revolving Credit Facility”) in February 2022. As of May 1, 2022, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to $100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD’s payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Bonds (including the 2022 Series J Bonds) and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

SMUD is responsible for the acquisition, generation, transmission and distribution of electric power to its service area, which includes most of Sacramento County and small portions of Placer and Yolo counties. For the year ended December 31, 2021, SMUD served a population of approximately 1.5 million with a total annual retail load of approximately 10,453 million kilowatt hours (“kWh”). SMUD owns and operates an electric system which, as of March 31, 2022, included generating facilities owned and operated by SMUD with an aggregate generating capacity of approximately 809 megawatts (“MW”), local gas-fired plants owned and operated by a joint powers authority and managed by SMUD with an aggregate generating capacity of approximately 1,081 MW, over which SMUD has exclusive control of dispatch, and purchased power with an aggregate generating capacity of approximately 1,366 MW and transmission and distribution facilities. SMUD’s power requirements exceed its generating capacity and thus SMUD has agreements with others (including the Local Gas-Fired Plants as defined in APPENDIX A) for the purchase of a portion of its power requirements. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – POWER SUPPLY AND TRANSMISSION – Power Supply Resources.” Continuing development of SMUD’s business strategy in response to changing environmental and regulatory requirements has had, and is expected to continue to have, a major effect on SMUD’s power supply planning. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – BUSINESS STRATEGY.”
Pursuant to a Continuing Disclosure Agreement, dated the date of issuance of the 2022 Series J Bonds (the “Continuing Disclosure Agreement”) between SMUD and the Trustee, SMUD will covenant for the benefit of the holders of the 2022 Series J Bonds and owners of beneficial interest in the 2022 Series J Bonds to provide certain financial information and operating data and to provide certain notices. See “CONTINUING DISCLOSURE UNDERTAKING” and APPENDIX F – “FORM OF CONTINUING DISCLOSURE AGREEMENT.”

The information presented in this Introduction is qualified in its entirety by reference to this entire Official Statement and the documents summarized or described herein. This Official Statement, including the Appendices, summarizes the terms of the 2022 Series J Bonds, the Resolution and certain agreements, contracts and other arrangements, some of which currently exist and others of which may exist in the future. The summaries of and references to all documents, statutes, regulations and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each such document, statute, regulation or instrument.

Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION – Certain Definitions” or in the Resolution.

PLAN OF FINANCE

The proceeds of the 2022 Series J Bonds will be used to (i) refund the $157,785,000 outstanding principal amount of the Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2012 Series Y maturing after August 15, 2022 (the “Refunded Bonds”) and (ii) pay certain costs associated with the issuance of the 2022 Series J Bonds. In connection with the refunding of the Refunded Bonds, SMUD expects to terminate an interest rate swap agreement that was executed in December of 2019 to hedge potential interest rate exposure relating to the future refunding of the Refunded Bonds. SMUD expects that it will receive a termination payment for the termination of the interest rate swap agreement.

A portion of the proceeds of the 2022 Series J Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “Escrow Fund”) established under an escrow agreement between SMUD and the Trustee. The moneys so deposited will be invested in direct obligations of the United States of America (the “Federal Securities”), the interest on and principal of which will be sufficient to pay the interest on the Refunded Bonds due on August 15, 2022 (the “Redemption Date”) and to redeem the Refunded Bonds on the Redemption Date. Upon deposit, all liability of SMUD with respect to the Refunded Bonds (except for the obligation of SMUD to pay the interest on and redemption price of the Refunded Bonds from moneys on deposit in the Escrow Fund) will cease. The holders of the Refunded Bonds will be entitled to payment from SMUD solely from moneys or Federal Securities on deposit in the Escrow Fund, and the Refunded Bonds will no longer be outstanding under the Resolution. The Federal Securities and moneys in the Escrow Fund will not secure the 2022 Series J Bonds and will not be available to pay the principal of or interest on the 2022 Series J Bonds.
ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds with respect to the 2022 Series J Bonds are as follows:

Sources of Funds:

- Principal Amount $
- [Net] Original Issue [Premium/Discount]
- Interest Fund Release
- Interest Rate Swap Termination Payment
- SMUD Contribution

Total Sources of Funds $

Uses of Funds:

- Refunding of Refunded Bonds $
- Costs of Issuance (including Underwriters’ Discount)

Total Uses of Funds $

THE 2022 SERIES J BONDS

The 2022 Series J Bonds will mature in the years and amounts and bear interest at the rates set forth on the inside cover page hereof. Interest on the 2022 Series J Bonds will accrue from the date of delivery of the 2022 Series J Bonds, and will be payable on February 15, 2023, and semiannually thereafter on each February 15 and August 15 (each, an “Interest Payment Date”) to the owners thereof as of the first day of the month (whether or not such day is a Business Day) in which an Interest Payment Date occurs (each, a “Record Date”).

The 2022 Series J Bonds will be issued in fully registered form and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository (the “Securities Depository”) for the 2022 Series J Bonds. Individual purchases of interests in the 2022 Series J Bonds will be made in book-entry form only, in the principal amount of $5,000 or any integral multiple thereof. Purchasers of such interests will not receive certificates representing their interests in the 2022 Series J Bonds. Principal and interest are payable directly to the Securities Depository by the Trustee. Upon receipt of payments of principal and interest, the Securities Depository will in turn remit such principal and interest to the Securities Depository’s Direct Participants (as such term is hereinafter defined) for subsequent disbursement to the purchasers of interests in the 2022 Series J Bonds. See APPENDIX C – “BOOK-ENTRY SYSTEM.”

The 2022 Series J Bonds are not subject to redemption prior to maturity.

DEBT SERVICE SCHEDULE

The following table sets forth the debt service requirements with respect to the 2022 Series J Bonds. See also APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Debt Service Requirements.”


SECURITY FOR THE BONDS

General

The principal of and premium, if any, and interest on the Bonds, together with other Parity Bonds, are payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Resolution) of, the Net Revenues of the Electric System of SMUD.

Neither the credit nor the taxing power of SMUD is pledged to the payment of the Bonds and the general fund of SMUD is not liable for the payment thereof. The owners of the Bonds cannot compel the exercise of any taxing power of SMUD or the forfeiture of any of its property. The Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any of SMUD’s property (including the Electric System) or upon any of its income, receipts or revenues except the Net Revenues of the Electric System to the extent of the pledge thereof contained in the Resolution.

Consent to Amendments to the Resolution

The purchasers of the 2022 Series J Bonds, by virtue of their purchase of the 2022 Series J Bonds, will consent to certain amendments to the Resolution (the “Proposed Amendments”). Such amendments are described in bold italic font herein under “SECURITY FOR THE BONDS – Rates and Charges” and “– Limitations on Additional Obligations Payable from Revenues” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION – Certain Definitions” and “– Reserve Fund for Certain Bonds.” The written consents to the Proposed Amendments of the holders and registered owners of at least 60% of the Bonds outstanding have been filed with SMUD or the Trustee, as required by the Resolution. However, while certain Bonds remain outstanding, SMUD must also obtain the written consents of certain bond insurers to implement the Proposed Amendments. SMUD expects to implement the Proposed Amendments when the written consents of such bond insurers are obtained or when the Bonds insured by such bond insurers are no longer outstanding. The final maturity date of the insured Bonds is July 1, 2024.

Allocation of Revenues

After making an allocation of Revenues to Maintenance and Operation Costs and to Energy Payments not included in Maintenance and Operation Costs, the Treasurer of SMUD is required (subject to the last paragraph of this section) to set aside, on an equal priority with sums set aside for all other Parity Bonds, Net Revenues as follows:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Principal</th>
<th>Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

$         $       $
**First:** To the Electric Revenue Bond Interest Fund, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-fifth (1/5) of the aggregate amount of interest becoming due on the Bonds on the next succeeding semiannual interest payment date, until an amount sufficient to meet said interest payment is accumulated.

**Second:** To the Electric Revenue Bond Redemption Fund, to be set aside in the Principal Account and Sinking Fund, respectively, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-tenth (1/10) of the aggregate amount of principal becoming due on serial Bonds and the aggregate minimum sinking fund payments required to be made with respect to term Bonds during the next ensuing 12 months, until an amount sufficient to meet the principal and sinking fund requirements on all Bonds outstanding is accumulated in said accounts, respectively.

**Third:** To the Electric Revenue Bond Reserve Fund, such amounts as any supplemental resolution authorizing the issuance of a series of Bonds may require to build up and maintain said fund.

If interest on Bonds of a series or maturity is payable more frequently than semiannually, the Treasurer of SMUD shall set aside out of Net Revenues in the Interest Fund such amounts as may be required to pay interest on the Bonds of such series or maturity on each interest payment date at least one month prior to such interest payment date. Allocation to the Electric Revenue Bond Redemption Fund and Electric Revenue Bond Reserve Fund shall be made as set forth above.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes.

From time to time SMUD may deposit in the Rate Stabilization Fund from such remaining Revenues such amounts as SMUD shall determine, provided that deposits in the Rate Stabilization Fund from remaining Revenues in any fiscal year may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings upon deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. No deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in any certificate submitted in connection with the issuance of additional bonds and withdrawal of the Revenues from the Revenues employed in rendering said certificate would have caused noncompliance with the additional bond provisions or to the extent withdrawals of the Revenues for any fiscal year would have reduced the debt service ratio for such fiscal year to or below 1.40:1.00. See APPENDIX A – “RATES AND CUSTOMER BASE – Rates and Charges” for a description of the balance in the Rate Stabilization Fund.

With respect to Bonds of a series issued on or after October 1, 2003 (including the 2022 Series J Bonds), notwithstanding the foregoing, so long as the Bonds of such series or maturity are outstanding, the supplemental resolution authorizing the issuance of such series shall require the Treasurer, out of Net Revenues received by SMUD, to set aside in the Interest Fund and the Principal Account, respectively, such amounts as may be required so that an amount equal to the amount of principal and/or interest becoming due and payable on the Bonds of such series or maturity on each interest payment date and principal payment date is on deposit in the Interest Fund and the Principal Account, respectively, at such time on or
prior to such interest payment date or principal payment date as shall be specified in the supplemental resolution authorizing such Bonds.

Rates and Charges

SMUD has covenanted in the Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs and, in addition, to provide an aggregate sum equal to at least 1.20 times the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on the Bonds and all Parity Bonds, in each case during such 12 months.

For purposes of the calculations of payments to be made pursuant to the Resolution, the interest rates on Parity Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds, interest on such Parity Bonds shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds in such fiscal year or period at the rate or rates stated in such Parity Bonds plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the above calculations of principal of and interest on Parity Bonds, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included; and for purposes of the above calculations of interest on Parity Bonds, the interest rates on Parity Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

For purposes of the calculations specified in this section: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that SMUD receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by SMUD with respect to or in connection with such Parity Bonds during such period of time.
See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Build America Bonds Subsidy Payments” for a description of the current Subsidy that SMUD receives with respect to certain Bonds.

See APPENDIX D hereto for the definitions of certain capitalized terms used in this section.

Limitations on Additional Obligations Payable from Revenues

The Resolution provides that SMUD will not, so long as any Bonds are outstanding, issue any obligations payable in whole or in part from Revenues except the following:

1. Refunding bonds issued solely to refund all or part of the Bonds or Parity Bonds;
2. General obligation bonds or other securities secured by the full faith and credit of SMUD;
3. Additional revenue bonds (including additional Bonds under the Resolution and additional Parity Bonds), payable on a parity with the Bonds, with an equal lien and charge upon the Revenues, but only subject to the following conditions:
   (a) Such additional revenue bonds shall have been authorized for and the proceeds therefrom required to be applied to additions, betterments, extensions or improvements to the Electric System (and necessary costs of issuance, interest during construction and reserve funds);
   (b) The proceedings for the issuance of such additional revenue bonds shall require SMUD to fix and collect rates and charges in an amount not less, with respect to such bonds, than the amounts required with respect to Bonds issued under the Resolution;
   (c) SMUD shall not then be in default under the Resolution or other resolutions authorizing the issuance of Parity Bonds; and
   (d) The Trustee shall receive a certificate of SMUD to the effect (i) that Net Revenues, after completion of the improvements proposed to be financed by such additional revenue bonds, will be sufficient to pay the principal of and interest (and bond reserve fund requirements) on all Bonds and Parity Bonds then outstanding and on such additional revenue bonds; and (ii) that for a period of 12 consecutive months during the 24 months immediately preceding the issuance of the additional revenue bonds the Net Revenues have been at least equal to 1.25 times maximum annual debt service on all Bonds and Parity Bonds then outstanding and on such additional revenue bonds (after adjusting Net Revenues to include 75 percent of the estimated additional Net Revenues to be derived from an increase in rates and charges or from the acquisition of an existing revenue producing electric system); and
4. Revenue bonds junior and subordinate to the Bonds and Parity Bonds.

For purposes of the above calculations, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included; and for purposes of the above calculations of interest on Parity Bonds, the interest rates on Parity Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds bear a rate or rates of interest for a known period or periods of time, such rate
or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds, interest on such Parity Bonds shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds in such fiscal year or period at the rate or rates stated in such Parity Bonds plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the calculations specified in this section: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that SMUD receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by SMUD with respect to or in connection with such Parity Bonds during such period of time.

See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Estimated Capital Requirements” for a description of SMUD’s projected capital requirements. Such capital requirements may be satisfied through the issuance of additional Bonds or Parity Bonds.

See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Build America Bonds Subsidy Payments” for a description of the current Subsidy that SMUD receives with respect to certain Bonds.

See APPENDIX D hereto for the definitions of certain capitalized terms used in this section.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SMUD owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. For a full description of SMUD, its history, organization, operations, and financial performance, certain developments in the energy markets, certain factors affecting the electric utility industry and certain regulatory and other matters, see APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT.”

ABSENCE OF LITIGATION REGARDING THE 2022 SERIES J BONDS

SMUD is not aware of any action, suit or proceeding, threatened or pending, to restrain or enjoin the issuance, sale or delivery of the 2022 Series J Bonds, or in any way contesting or affecting the validity of the 2022 Series J Bonds or any of the proceedings of SMUD taken with respect to the 2022 Series J Bonds. SMUD is not aware of any action, suit or proceeding, threatened or pending, questioning the corporate existence of SMUD, or the title of the officers of SMUD to their respective offices, or the power and authority of SMUD to execute and deliver the 2022 Series J Bonds. For a description of certain
litigation in which SMUD is involved, see APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – LEGAL PROCEEDINGS.”

UNDERWRITING

Morgan Stanley & Co. LLC, BofA Securities, Inc., Barclays Capital Inc., Citigroup Global Markets, Inc., Goldman Sachs & Co. LLC, and J.P. Morgan Securities LLC (“JPMS”) (each an “Underwriter” and, collectively, the “Underwriters”) have jointly and severally agreed, subject to certain customary conditions to closing, to purchase the 2022 Series J Bonds from SMUD at an aggregate purchase price of $_________ (being the aggregate principal amount of the 2022 Series J Bonds, plus [net] original issue [premium/discount] of $_______, and less Underwriters’ discount of $______). The Underwriters will be obligated to purchase all 2022 Series J Bonds if any 2022 Series J Bonds are purchased. The Underwriters have agreed to make a public offering of the 2022 Series J Bonds at the initial offering prices set forth on the inside cover page hereof. The 2022 Series J Bonds may be offered and sold to certain dealers (including underwriters and other dealers depositing such bonds into investment trusts) at prices lower than such public offering prices, and such public offering prices may be changed, from time to time, by the Underwriters.

Morgan Stanley & Co. LLC., an Underwriter of the 2022 Series J Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the 2022 Series J Bonds.

[BofA Securities, Inc., an Underwriter of the 2022 Series J Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated (“MLPF&S”). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the 2022 Series J Bonds.]

[Citigroup Global Markets Inc., an Underwriter of the 2022 Series J Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, “Fidelity”). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.]

[JPMS, one of the Underwriters of the Bonds, has entered into negotiated dealer agreements (each, a “Dealer Agreement”) with each of Charles Schwab & Co., Inc. (“CS&Co.”) and LPL Financial LLC (“LPL”) for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase 2022 Series J Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any 2022 Series J Bonds that such firm sells.]

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for SMUD for which they received or will receive customary fees and expenses.
In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of, or issued for the benefit of, SMUD.

**MUNICIPAL ADVISOR**

SMUD has retained PFM Financial Advisors LLC, as Municipal Advisor in connection with various matters relating to the delivery of the 2022 Series J Bonds. The Municipal Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Municipal Advisor is an independent advisory firm and is not engaged in underwriting or distribution of securities. The Municipal Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2022 Series J Bonds.

**SWAP ADVISOR**

SMUD has retained Swap Financial Group, LLC, as Swap Advisor in connection with various matters relating to the termination of the interest rate swap entered into in anticipation of the issuance of the 2022 Series J Bonds. The Swap Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Swap Advisor is an independent advisory firm and is not engaged in underwriting or distribution of securities or the trading of interest rate swaps. The Swap Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2022 Series J Bonds.

**APPROVAL OF LEGAL PROCEEDINGS**

The validity of the 2022 Series J Bonds and certain other legal matters are subject to the approval of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. The approving opinion of Bond Counsel will be delivered with the 2022 Series J Bonds in substantially the form appearing in APPENDIX E. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed on for the Underwriters by Nixon Peabody LLP, San Francisco, California, counsel to the Underwriters.

**FINANCIAL STATEMENTS**

SMUD’s audited, consolidated financial statements for the years ended December 31, 2021 and December 31, 2020 are included in APPENDIX B attached to this Official Statement. These financial statements have been audited by Baker Tilly Virchow Krause, LLP, Madison, Wisconsin (the “Auditor”), for the periods indicated and to the extent set forth in their report thereon and should be read in their entirety. SMUD has not requested nor did it obtain permission from the Auditor to include the audited, consolidated financial statements as an appendix to this Official Statement. Accordingly, the Auditor has not performed any procedures to review the financial condition or operations of SMUD subsequent to the date of its report included therein, nor has it reviewed any information contained in this Official Statement.

**TAX MATTERS**

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD (“Bond Counsel”), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on
the 2022 Series J Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code") and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2022 Series J Bonds is not a specific preference item for purposes of the federal alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2022 Series J Bonds. A complete copy of the proposed form of opinion of Bond Counsel is set forth in APPENDIX E hereto.

To the extent the issue price of any maturity of the 2022 Series J Bonds is less than the amount to be paid at maturity of such 2022 Series J Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2022 Series J Bonds), the difference constitutes “original issue discount,” the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2022 Series J Bonds which is excluded from gross income for federal income tax purposes and exempt from State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2022 Series J Bonds is the first price at which a substantial amount of such maturity of the 2022 Series J Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2022 Series J Bonds accrues daily over the term to maturity of such 2022 Series J Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2022 Series J Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2022 Series J Bonds. Beneficial Owners of the 2022 Series J Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2022 Series J Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2022 Series J Bonds in the original offering to the public at the first price at which a substantial amount of such 2022 Series J Bonds is sold to the public.

2022 Series J Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2022 Series J Bonds. SMUD has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2022 Series J Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2022 Series J Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2022 Series J Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel’s attention after the date of issuance of the 2022 Series J Bonds may adversely affect the value of, or the tax status of interest on, the 2022 Series J Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.
Although Bond Counsel is of the opinion that interest on the 2022 Series J Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2022 Series J Bonds may otherwise affect a Beneficial Owner’s federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner’s other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2022 Series J Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2022 Series J Bonds. Prospective purchasers of the 2022 Series J Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel’s judgment as to the proper treatment of the 2022 Series J Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service (“IRS”) or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of SMUD, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. SMUD has covenanted, however, to comply with the requirements of the Code.

Bond Counsel’s engagement with respect to the 2022 Series J Bonds ends with the issuance of the 2022 Series J Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend SMUD or the Beneficial Owners regarding the tax-exempt status of the 2022 Series J Bonds in the event of an audit examination by the IRS. Under current procedures, Beneficial Owners would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which SMUD legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the 2022 Series J Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2022 Series J Bonds, and may cause SMUD or the Beneficial Owners to incur significant expense.

Payments on the 2022 Series J Bonds generally will be subject to U.S. information reporting and possibly to “backup withholding.” Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate Beneficial Owner of 2022 Series J Bonds may be subject to backup withholding with respect to “reportable payments,” which include interest paid on the 2022 Series J Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2022 Series J Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number (“TIN”) to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a “notified payee underreporting” described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against a Beneficial Owner’s federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain Beneficial Owners (including among others, corporations and certain tax-exempt organizations) are
not subject to backup withholding. The failure to comply with the backup withholding rules may result in
the imposition of penalties by the IRS.

CONTINUING DISCLOSURE UNDERTAKING

Pursuant to the Continuing Disclosure Agreement, SMUD will covenant for the benefit of the
holders and the “Beneficial Owners” (as defined in the Continuing Disclosure Agreement) of the 2022
Series J Bonds to provide certain financial information and operating data relating to SMUD by not later
than 180 days after the end of each of SMUD’s fiscal years (presently, each December 31), commencing
with the report for the year ending December 31, 2022 (the “Annual Report”), and to provide notices of the
occurrence of certain listed events with respect to the 2022 Series J Bonds. The Annual Report will be filed
by or on behalf of SMUD with the Municipal Securities Rulemaking Board (the “MSRB”) through its
Electronic Municipal Market Access system (“EMMA”) and any notices of such listed events will be filed
by or on behalf of SMUD with the MSRB through EMMA. The specific nature of the information to be
contained in the Annual Report and the notices of listed events are set forth in the form of the Continuing
Disclosure Agreement which is included in its entirety in APPENDIX F hereto. SMUD’s covenant will be
made in order to assist the Underwriters in complying with Securities and Exchange Commission Rule
15c2-12.

[In a limited number of circumstances, certain of the annual reports, audited financial statements
or listed event filings required to be made by SMUD during the last five years under its continuing
disclosure undertakings were not connected to all of the CUSIP numbers of the bonds subject to the
continuing disclosure undertakings. In addition, SMUD entered into two subordinated forward starting
interest rate swaps in December 2019 and filed a notice of the interest rate swaps with the MSRB through
EMMA in April 2020. A notice of rating upgrade on October 6, 2020, by Moody’s Investors Service of
the Northern California Gas Authority No. I Gas Project Revenue Bonds, Series 2007B, was also not filed
until October 28, 2020.]

RATINGS

Fitch Ratings, Inc. (“Fitch”) and S&P Global Ratings (“S&P”) have assigned ratings of
“[AA (stable outlook)]” and “[AA (stable outlook)],” respectively, to the 2022 Series J Bonds. Such ratings
reflect only the views of such organizations and are not a recommendation to buy, sell or hold the 2022
Series J Bonds. Explanations of the significance of such ratings may be obtained only from the respective
rating agencies. SMUD has furnished to Fitch and S&P certain information and materials concerning the
2022 Series J Bonds and itself. Generally, a rating agency bases its rating on the information and materials
furnished to it and on investigations, studies and assumptions of its own. There is no assurance that such
ratings will continue for any given period or that they will not be revised downward, suspended or
withdrawn entirely by the respective rating agencies, if in the judgment of such rating agency,
circumstances so warrant. SMUD has not, other than as described under “CONTINUING DISCLOSURE
UNDERTAKING” above, and the Underwriters have not undertaken any responsibility either to bring to
the attention of the holders or beneficial owners of the 2022 Series J Bonds any proposed revision,
suspension or withdrawal of any rating on the 2022 Series J Bonds or to oppose any such proposed revision,
suspension or withdrawal. Any such downward revision, suspension or withdrawal of such ratings may
have an adverse effect on the market price or marketability of the 2022 Series J Bonds.

VERIFICATION

Upon delivery of the 2022 Series J Bonds, [________] (the “Verification Agent”) will verify, from
the information provided to it, the mathematical accuracy as of the date of the closing of the 2022 Series J
Bonds of the computations contained in the provided schedules to determine that the anticipated receipts
from the securities and cash deposits listed in the Underwriters’ schedules, to be held in escrow, will be sufficient to pay, when due, the interest on and redemption requirements of the Refunded Bonds. The Verification Agent will express no opinion on the assumptions provided to them.

MISCELLANEOUS

This Official Statement includes descriptions of the terms of the 2022 Series J Bonds, power purchase agreements with certain other parties, pooling and other agreements, the Resolution and certain provisions of the Act. Such descriptions do not purport to be complete, and all such descriptions and references thereto are qualified in their entirety by reference to each such document.

Copies of the Resolution, which forms a contract with the holders of the 2022 Series J Bonds, will be made available upon request.
This Official Statement has been duly authorized by the Board of Directors of SMUD.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: ________________________________
Chief Executive Officer and General Manager
APPENDIX A

INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT
APPENDIX A

INFORMATION REGARDING
SACRAMENTO MUNICIPAL UTILITY DISTRICT
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>A-1</td>
</tr>
<tr>
<td>General</td>
<td>A-1</td>
</tr>
<tr>
<td>Independent Governance</td>
<td>A-1</td>
</tr>
<tr>
<td>THE SERVICE AREA AND ELECTRIC SYSTEM</td>
<td>A-4</td>
</tr>
<tr>
<td>The Service Area</td>
<td>A-4</td>
</tr>
<tr>
<td>The Electric System</td>
<td>A-5</td>
</tr>
<tr>
<td>BUSINESS STRATEGY</td>
<td>A-5</td>
</tr>
<tr>
<td>General</td>
<td>A-5</td>
</tr>
<tr>
<td>Serving SMUD's Customers</td>
<td>A-6</td>
</tr>
<tr>
<td>Sustainable Power Supply and Transmission</td>
<td>A-8</td>
</tr>
<tr>
<td>Electricity, Natural Gas, and Related Hedging</td>
<td>A-13</td>
</tr>
<tr>
<td>Managing Risks</td>
<td>A-14</td>
</tr>
<tr>
<td>Competitive Challenges</td>
<td>A-14</td>
</tr>
<tr>
<td>Leveraging Core Competencies</td>
<td>A-15</td>
</tr>
<tr>
<td>FACTORS AFFECTING THE REGION</td>
<td>A-16</td>
</tr>
<tr>
<td>Precipitation Variability</td>
<td>A-16</td>
</tr>
<tr>
<td>Wildfires</td>
<td>A-17</td>
</tr>
<tr>
<td>August 2020 Heat Wave</td>
<td>A-19</td>
</tr>
<tr>
<td>Impacts from COVID-19 Pandemic</td>
<td>A-19</td>
</tr>
<tr>
<td>RATES AND CUSTOMER BASE</td>
<td>A-20</td>
</tr>
<tr>
<td>Rates and Charges</td>
<td>A-20</td>
</tr>
<tr>
<td>Rate Stabilization Funds</td>
<td>A-21</td>
</tr>
<tr>
<td>Low Income Discount</td>
<td>A-22</td>
</tr>
<tr>
<td>Rate Comparisons</td>
<td>A-23</td>
</tr>
<tr>
<td>Allocation of Revenue by Customer Class</td>
<td>A-25</td>
</tr>
<tr>
<td>Customer Base; Largest Customers</td>
<td>A-26</td>
</tr>
<tr>
<td>POWER SUPPLY AND TRANSMISSION</td>
<td>A-27</td>
</tr>
<tr>
<td>Power Supply Resources</td>
<td>A-27</td>
</tr>
<tr>
<td>Power Generation Facilities</td>
<td>A-28</td>
</tr>
<tr>
<td>Fuel Supply</td>
<td>A-31</td>
</tr>
<tr>
<td>Gas Transmission</td>
<td>A-33</td>
</tr>
<tr>
<td>Gas Storage</td>
<td>A-34</td>
</tr>
<tr>
<td>Power Purchase Agreements</td>
<td>A-34</td>
</tr>
<tr>
<td>Transmission Service Agreements</td>
<td>A-37</td>
</tr>
<tr>
<td>Projected Resources</td>
<td>A-39</td>
</tr>
<tr>
<td>Demand Side Management Programs</td>
<td>A-39</td>
</tr>
<tr>
<td>Balancing Authority Area Agreements</td>
<td>A-42</td>
</tr>
<tr>
<td>Power Pool and Other Agreements</td>
<td>A-42</td>
</tr>
<tr>
<td>Other Agreements with PG&amp;E</td>
<td>A-43</td>
</tr>
<tr>
<td>SELECTED OPERATING DATA</td>
<td>A-44</td>
</tr>
<tr>
<td>SELECTED FINANCIAL DATA</td>
<td>A-44</td>
</tr>
<tr>
<td>SMUD Financial Information</td>
<td>A-44</td>
</tr>
<tr>
<td>Financial Information of SMUD and the Authorities</td>
<td>A-46</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Management’s Discussion of SMUD’s Operating Results</td>
<td>A-47</td>
</tr>
<tr>
<td>RANCHO SECO DECOMMISSIONING</td>
<td>A-48</td>
</tr>
<tr>
<td>EMPLOYEE RELATIONS</td>
<td>A-50</td>
</tr>
<tr>
<td>RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS</td>
<td>A-50</td>
</tr>
<tr>
<td>Pension Plans</td>
<td>A-50</td>
</tr>
<tr>
<td>Other Post-Employment Benefits</td>
<td>A-52</td>
</tr>
<tr>
<td>CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS</td>
<td>A-53</td>
</tr>
<tr>
<td>Estimated Capital Requirements</td>
<td>A-53</td>
</tr>
<tr>
<td>Outstanding Indebtedness</td>
<td>A-53</td>
</tr>
<tr>
<td>INSURANCE</td>
<td>A-58</td>
</tr>
<tr>
<td>LEGAL PROCEEDINGS</td>
<td>A-58</td>
</tr>
<tr>
<td>Environmental Litigation</td>
<td>A-58</td>
</tr>
<tr>
<td>Claim for Accidental Death</td>
<td>A-59</td>
</tr>
<tr>
<td>Proposition 26 Lawsuit</td>
<td>A-59</td>
</tr>
<tr>
<td>Other Litigation Matters</td>
<td>A-59</td>
</tr>
<tr>
<td>FERC Administrative Proceedings</td>
<td>A-59</td>
</tr>
<tr>
<td>CPUC Administrative Proceedings</td>
<td>A-60</td>
</tr>
<tr>
<td>DEVELOPMENTS IN THE ENERGY MARKETS</td>
<td>A-61</td>
</tr>
<tr>
<td>Background; Electric Market Deregulation</td>
<td>A-61</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>A-61</td>
</tr>
<tr>
<td>Federal Legislation and Regulatory Proceedings</td>
<td>A-62</td>
</tr>
<tr>
<td>State Legislation and Regulatory Proceedings</td>
<td>A-65</td>
</tr>
<tr>
<td>Future Regulation</td>
<td>A-72</td>
</tr>
<tr>
<td>OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY</td>
<td>A-73</td>
</tr>
<tr>
<td>CAISO Market Initiatives</td>
<td>A-73</td>
</tr>
<tr>
<td>Resource Adequacy Filing</td>
<td>A-73</td>
</tr>
<tr>
<td>Energy Imbalance Market</td>
<td>A-73</td>
</tr>
<tr>
<td>Community Choice Aggregation</td>
<td>A-74</td>
</tr>
<tr>
<td>PG&amp;E Bankruptcy</td>
<td>A-75</td>
</tr>
<tr>
<td>Other Factors</td>
<td>A-75</td>
</tr>
</tbody>
</table>
BOARD OF DIRECTORS

Brandon Rose, President
Heidi Sanborn, Vice President
Nancy Bui-Thompson
Gregg Fishman
Rosanna Herber
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Interim Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Frankie McDermott, Chief Operating Officer
Lora Anguay, Chief Zero Carbon Officer
Jennifer Davidson, Chief Financial Officer
Farres Everly, Director, Communications, Marketing & Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

1 The previous Chief Diversity Officer, Gary King, retired as of March 31, 2022. The Chief Diversity Officer position is currently being filled on a rotational interim basis. See “INTRODUCTION – Independent Governance – Chief Diversity Officer.”
INTRODUCTION

General

The Sacramento Municipal Utility District (“SMUD”) owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. See “THE SERVICE AREA AND ELECTRIC SYSTEM – The Service Area.”

Independent Governance

SMUD is an independently run community-owned organization. SMUD is not required by law to transfer any portion of its collections from customers to any local government.

SMUD is governed by a Board of Directors (the “Board”), which consists of seven directors elected by ward for staggered four-year terms. The Board determines policy and appoints the Chief Executive Officer and General Manager, who is responsible for SMUD’s overall management and day-to-day operations. The Chief Executive Officer and General Manager is responsible for the hiring and removal of all employees, other than the Chief Legal Officer and General Counsel, the Internal Auditor and the Special Assistant to the Board, who are hired and may be removed only by the Board. The employment status of nearly all SMUD employees is governed by a civil service system administered by the Chief Executive Officer and General Manager.

The Board elects its President and Vice President annually to take office in January. The current members of the Board are as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Term Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brandon Rose, President</td>
<td>Air Pollution Specialist, California Environmental Protection Agency</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Heidi Sanborn, Vice President</td>
<td>Executive Director, National Stewardship Action Council</td>
<td>December 31, 2022</td>
</tr>
<tr>
<td>Nancy Bui-Thompson</td>
<td>Chief Information Officer, Wellspace Health</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Gregg Fishman</td>
<td>Communications Specialist</td>
<td>December 31, 2022</td>
</tr>
<tr>
<td>Rosanna Herber</td>
<td>Retired Utility Director</td>
<td>December 31, 2022</td>
</tr>
<tr>
<td>Rob Kerth</td>
<td>Business Owner</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Dave Tamayo</td>
<td>Environmental Specialist IV, County of Sacramento</td>
<td>December 31, 2022</td>
</tr>
</tbody>
</table>

SMUD’s senior management consists of the following executives:

Chief Executive Officer & General Manager. Paul Lau was named chief executive officer and general manager (“CEO & GM”) of SMUD in October 2020. He reports to the SMUD Board of Directors. As CEO & GM, he leads the sixth largest community-owned electric utility in the nation, serving a population of approximately 1.5 million residents and managing a $1.7 billion budget. Mr. Lau previously served as SMUD’s Chief Grid Strategy & Operations Officer and has held several other executive leadership positions during his 40-year career at SMUD. He serves on several national and local boards, including the Large Public Power Council, California Municipal Utilities Association, American Public Power Association, and Smart Electric Power Alliance, and as a Commissioner of the Balancing Authority.
of Northern California (“BANC”). A registered professional electrical engineer in the State of California (the “State”), Mr. Lau received his bachelor’s degree in electrical power engineering from California State University, Sacramento.

**Chief Customer Officer.** Brandy Bolden reports to the CEO & GM and oversees SMUD’s Customer and Community Services business unit. She is responsible for customer experience delivery across our residential and commercial customer segments. She provides leadership and oversight of customer operations including customer care and revenue management, business intelligence, strategic account management, customer experience and segmentation strategy, channel management, customer program and service delivery, and special assistance. She is also responsible for commercial development and business attraction and oversees Community Energy Services, which provides services and support for community choice aggregators. Since joining SMUD in 2003, Brandy has demonstrated strong leadership and held a variety of senior leadership roles, including leading the Customer & Community Services project management office and the dual role of director of Customer Care and Revenue Operations. Ms. Bolden led the team responsible for implementing time-of-day rates, streamlining the meter-to-cash processes, delivering key billing and payment experience enhancements and recognizing operational efficiencies that resulted in sustained annual savings for SMUD. Ms. Bolden holds a bachelor’s degree in Sociology from University of California, Davis.

**Chief Information Officer.** Suresh Kotha reports to the CEO & GM and is responsible for SMUD’s information technology strategy, operations, infrastructure, IT Project Management Office, enterprise innovation process, and cybersecurity. More recently, Mr. Kotha has been leading many technology efforts that are integral to developing a grid of the future that will help us achieve our zero carbon goal, including our Advanced Distribution Management System, the software platform that supports the full suite of distribution management and optimization, and next-generation network upgrades. Mr. Kotha joined SMUD in 2002 as a principal technical developer, with responsibility for designing and leading implementation and upgrades of multiple technology systems, including the SAP software platform and our meter-to-cash systems. He holds a Master’s of Technology in Computer Science from Jawaharlal Nehru Technology University and a Bachelor of Engineering in Electronics & Communications Engineering from Gulbarga University.

**Chief Diversity Officer.** The Chief Diversity Officer reports to the CEO & GM and is responsible for human resources, workforce diversity and inclusion and SMUD’s Sustainable Communities program. The previous Chief Diversity Officer, Gary King, retired as of March 31, 2022. The Chief Diversity Officer position is currently being filled on a rotational interim basis. The three current Workforce, Diversity & Inclusion Directors will each serve in the role for a 3-month period, starting with Jose Bodipo-Memba. Jose started in this new role on April 2, 2022. He will be followed by Laurie Rodriguez beginning on July 2, 2022, and Markisha Webster beginning on Oct. 1, 2022, following which the position will be filled from among the three directors.

**Chief Strategy Officer.** Scott Martin reports to the CEO & GM and is responsible for looking holistically at all strategies across the company and driving prioritization including zero carbon, rates and pricing, enterprise strategic planning and enterprise prioritization. Mr. Martin is a seasoned executive with more than 30 years of experience. Prior to assuming this role, Mr. Martin was a director for resource planning and new business strategy. Previous experience also includes customer strategy planning supervisor. Mr. Martin joined SMUD in 1999 and holds a bachelor of arts degree in economics from the University of California, Berkeley and a master of arts degree in economics from the University of Nevada, Las Vegas.

**Chief Legal & Government Affairs Officer and General Counsel.** Laura Lewis was named general counsel for SMUD in April 2014. In this position she serves as chief lawyer and manages SMUD’s
legal office and its staff of eight attorneys. She also serves as the secretary to SMUD’s elected board of
directors. She reports to the Board and to the CEO & GM and has responsibility for all legal matters in
which SMUD is a party to, or has an interest in. Ms. Lewis also oversees SMUD’s government affairs and
reliability compliance department. In this capacity, she is responsible for management and coordination of
all legislative matters and regulatory requirements affecting SMUD at the state and federal level, including
the FERC-NERC electric reliability standards. Ms. Lewis joined SMUD in 1997 as a staff attorney, serving
in that capacity through 1999, after which she moved to the San Francisco law firm Davis Wright Tremaine.
In 2002, she returned to SMUD as a senior attorney. In 2010, she became assistant general counsel and in
2013 was appointed chief assistant general counsel. She holds a juris doctorate from McGeorge School of
Law, where she won membership in the Order of the Coif honor society. She holds a bachelor’s degree in
political science from the University of California, San Diego and is a member of the American Bar
Association, the Energy Bar Association, and the State Bar of California.

**Chief Operating Officer.** Frankie McDermott reports to the CEO & GM and is responsible for
providing strategic leadership and tactical oversight related to the safe and reliable transmission and
delivery of energy to customers, ensuring efficient planning, construction, operation and maintenance of
transmission, and distribution facilities requirements in order to safely and efficiently meet customer
demands. This position has primary responsibility for the processes and functions related to system
reliability and operations across SMUD. The Chief Operating Officer is also the safety leader for the
enterprise, leader of operational efficiency and responsible for all non-IT capital investments. Prior to this
role, Mr. McDermott served as Chief Energy Delivery Officer and Chief Customer Officer, responsible for
SMUD's overall retail strategy. From 2010 to 2014, he served as customer services director, which
included managing relationships with customer segments as SMUD moved forward with smart-grid
technologies. Prior to that, he served as manager of enterprise performance and held positions in supply
chain and in general services. Before joining SMUD in 2003, Mr. McDermott served in management roles
in the semiconductor industry at NEC Electronics in Roseville, California and in Ireland. After engineering
school in Ireland, he earned an MBA from Golden Gate University and completed the Advanced
Management Program at the Haas School of Business at the University of California Berkeley.

**Chief Zero Carbon Officer.** Lora Anguay reports to the CEO & GM and is responsible for
leadership oversight of SMUD’s Energy Supply which includes Energy Trading and Contracts and
SMUD’s Power Generation Assets. This role is also responsible for the delivery of SMUD’s plan to provide
100% carbon free energy resources by 2030. This includes obtaining new grants and partnerships,
overseeing research and development, designing distributed energy resource programs, enabling processes
to settle distributed energy transactions with SMUD’s customers and transitioning SMUD’s power
generation assets and energy contracts to zero carbon resources. Prior to assuming this role, Ms. Anguay
was the director of Distribution Operations & Maintenance and was responsible for the day to day
operations of SMUD’s electric distribution grid. Before that she was an engineering designer, process
control supervisor, project manager for smart meter deployment, a senior project manager for smart grid
distribution automation and supervisor in Grid Assets. Before SMUD, she worked for Oracle Corporation
as a finance manager and is a veteran who served in the United States Coast Guard. Ms. Anguay joined
SMUD in 2004 and holds a Bachelor of Science degree in business administration from California State
University, Sacramento.

**Chief Financial Officer.** Jennifer Davidson was named chief financial officer (“CFO”) in 2017.
Reporting to the CEO & GM, she oversees corporate accounting, treasury operations and risk management,
and planning and budget functions and is also responsible for key corporate services, including facilities,
security, image production and postal service, purchasing, warehouse and fleet. Ms. Davidson joined
SMUD in 2006 and previously served as director of budget, enterprise performance and risk management.
Before joining SMUD, Ms. Davidson held management positions with investor-owned utility Southern
California Edison and software and services provider Amdocs. She holds a bachelor’s degree in geography from the University of California, Los Angeles.

**Director, Communications, Marketing & Community Relations.** Farres Everly reports to the CEO & GM and since 2009 has been responsible for oversight of the SMUD brand, all external and internal strategic marketing and communications activities and campaigns and SMUD’s outreach efforts to the community and the State’s capital region, including volunteerism, events and sponsorships. He previously served as SMUD’s Manager of Advertising and Promotions. Prior to joining SMUD, Mr. Everly held marketing leadership positions at VSP Vision Care, The Money Store and the Sacramento Metropolitan Chamber of Commerce. He holds a bachelor’s degree in Journalism from California State University, Chico.

**Treasurer.** Russell Mills reports to the CFO. He oversees all treasury operations, including debt and cash management, banking, financial planning and forecasting, enterprise and commodity risk management, property and casualty insurance, and is responsible for developing and implementing capital borrowing strategies. Mr. Mills also serves as treasurer for the Transmission Agency of Northern California (“TANC”), the Central Valley Financing Authority (“CVFA”), the Sacramento Cogeneration Authority (“SCA”), the Sacramento Municipal Utility District Financing Authority (“SFA”), the Sacramento Power Authority (“SPA”), the Northern California Gas Authority No. 1 (“NCGA”), the Northern California Energy Authority (“NCEA”) and BANC. Before joining SMUD in 2018 as Treasurer, Mr. Mills served as Chief Financial Officer of Southern California Public Power Authority. He also served as the Chief Financial Officer of the Power Supply Program at the California Department of Water Resources. He holds an MBA from Loyola Marymount University, and a bachelor’s degree in economics from Towson University in Baltimore, Maryland. Mr. Mills also holds the Energy Risk Professional (ERP) designation and is a CFA level II candidate.

**Controller.** Lisa Limcaco reports to the CFO and is responsible for accounting and financial reporting at SMUD. Prior to her appointment as controller in 2020, Ms. Limcaco served as an assistant controller, manager of customer value, performance and projects, senior energy commodity specialist and as principal accountant for SMUD’s joint powers authorities. Ms. Limcaco also serves as controller for TANC, CVFA, SCA, SFA, SPA, NCGA, NCEA and BANC. Before joining SMUD in 2010 as a senior accountant, Ms. Limcaco had 12-years’ experience as the Director of Accounting and controller for a food service provider in Sacramento and over 13-years’ experience in public accounting including audit manager at Price Waterhouse LLP. Ms. Limcaco holds a bachelor’s degree in accounting from the University of Hawaii, a Master of Business Administration from Sacramento State University and is a Certified Public Accountant in the State.

**THE SERVICE AREA AND ELECTRIC SYSTEM**

**The Service Area**

SMUD is the primary distributor of electric power within an area of approximately 900 square miles in central California. The service area includes the State Capital, Sacramento, the populous areas principally to the northeast and south of the City of Sacramento (the “City” or “Sacramento”) and the agricultural areas to the north and south. The City is located 85 miles northeast of San Francisco.

SMUD’s electric system supplies power to a population of approximately 1.5 million with a total annual retail load of approximately 10,453 million kilowatt-hours (“kWh”) for the year ended December 31, 2021. As the capital of the nation’s most populous state, Sacramento benefits from the historically stabilizing influence of a large government sector. Sacramento is home to the State government headquarters, the Sacramento County seat, the City government and various special districts that combine
to make government the largest single employment sector in the Sacramento area. Information technology, transportation, education and health services, leisure and hospitality, and construction round out the other major sectors of employment and industry in the area.

SMUD’s annual peak load has averaged 3,001 Megawatts (“MW”) over the last three years, with SMUD’s record peak load of 3,299 MW occurring on July 24, 2006. In 2017, SMUD recorded its second highest peak load of 3,157 MW. In 2021, SMUD’s peak load was 3,019 MW. SMUD reviews its load forecast, at a minimum, on an annual basis.

The Electric System

SMUD owns and operates an integrated electric system that includes generation, transmission and distribution facilities.

SMUD supplies power to its bulk power substations through a 230 kilovolt (“kV”) and 115 kV transmission system. This system transmits power from SMUD’s generation plants and interconnects with Pacific Gas & Electric (“PG&E”) and the Western Area Power Administration (“WAPA”). Power is distributed throughout Sacramento County via a 69 kV sub-transmission system with the exception of the City’s downtown area, which is served from the 115 kV transmission system. The downtown area is served from 115/12 kV and 115/21 kV substations. The distribution system serving the remainder of SMUD’s service territory is comprised of 69/12 kV substations with overhead and underground 12 kV distribution circuits.

BUSINESS STRATEGY

General

SMUD’s Board of Directors has established the following purpose and vision statements: “SMUD’s purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity, and leading the transition to a clean energy future. SMUD’s vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.” The Board has adopted a set of Strategic Directions with related metrics, which it considers essential for the success of SMUD and for serving SMUD’s customers. These include competitive rates, access to credit markets, reliability, customer relations, environmental leadership, resource planning, enterprise risk management and safety. Some of the general elements in SMUD’s business strategy are:

- developing and maintaining a sustainable and reliable power supply to meet demand growth consistent with State mandates and the Board’s directions for renewable energy and the reduction of carbon emissions to zero by 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan”;
- working closely with customers to provide the information, tools and incentives to assist them to more efficiently manage energy use, which will contribute to meeting greenhouse gas (“GHG”) emission targets and managing needle peak demand requirements (those 40 or so hours of the year with extreme temperatures when customer demand surges by up to 400 additional MW);
- managing price, volumetric and credit risks associated with energy and natural gas procurement;
• attracting, developing and retaining a diverse, skilled and engaged workforce that reflects SMUD’s values and is committed to achieving SMUD’s mission;
• retaining local decision making authority and operational independence; and
• collaborating regionally to attract new businesses and grow existing business to diversify and strengthen the Sacramento economy.

SMUD’s long-range business strategy focuses in part on ensuring financial stability by establishing rates that provide an acceptable fixed charge coverage ratio on a consolidated basis, taking into consideration the impact of capital expenditures and other factors on cash flow. SMUD’s Board policy sets a minimum fixed charge coverage ratio of 1.50 times for annual budgets, though it generally plans to meet a minimum fixed charge coverage ratio of 1.70 times. Over the past ten years, the actual fixed charge coverage ratio has averaged 2.14 times on a consolidated basis. SMUD also manages its liquidity position by planning for a minimum of 150 days cash on hand and planning to maintain at least $150 million of available capacity under its commercial paper and line of credit program. As of June 1, 2022, SMUD had all $400 million of the authorized principal amount of its commercial paper and line of credit program available for use. SMUD uses cash on hand and commercial paper and a line of credit to fund capital expenditures, then issues debt to reimburse itself for cash expended for qualified capital expenditures or to pay down the outstanding principal amount of its commercial paper program and line of credit. Over the past ten years, the days cash on hand has averaged 218. The resolutions securing SMUD’s Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below) do not require SMUD to maintain a minimum fixed charge coverage ratio, minimum days cash on hand or minimum available capacity under its commercial paper program and line of credit.

In addition, SMUD’s business strategy focuses on servicing its customers in a progressive, forward-looking manner, addressing current regulatory and legislative issues and potential competitive forces.

Serving SMUD’s Customers

SMUD continually looks for ways to better serve and partner with its customers to further strengthen customer loyalty, while providing reasonable product pricing. SMUD also has a focused effort to assist and incentivize customers to more efficiently manage energy use, which will contribute to meeting GHG emission targets and managing peak demand requirements as noted below.

Digital Enhancements. Customers are increasingly turning to digital channels such as the new SMUD application, SMUD website, e-mail and social media to interact and do business with SMUD. SMUD has delivered many digital enhancements, including bill pay functionality; online payment arrangements; start/stop/transfer move service; view of energy usage, chat, an enhanced outage map; and the SMUD Energy Store, which is an online marketplace for energy-related products. SMUD plans to continue efforts to provide more personalized digital customer experiences.

Advanced Metering, Infrastructure and Rate Design. As a community-owned organization, SMUD is dedicated to providing the tools and transparency in customer energy usage to enable customers to easily and positively affect energy usage, energy cost, and climate change. In 2012 SMUD installed smart technology, including 617,000 digital communicating smart meters, distribution automation systems and equipment to facilitate load management. The advanced technology has allowed SMUD to deliver tools such as text and e-mail bill alerts and online energy usage comparison charts to help customers manage energy use. SMUD has leveraged smart grid investments to improve reliability, reduce losses, reduce power quality issues and improve customer service through better, more timely information, particularly related to outages.
**Time-of-Day Rates.** On June 15, 2017, the Board approved time-of-day (“TOD”) rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018 and was completed in the fourth quarter of 2019. Currently, about 98% of residential customers are on TOD rates.

All of SMUD’s business customers are also on time-based rates. On June 24, 2019, the Board approved an update to the commercial TOD rates to improve consistency and better align commercial rates with current energy market prices. Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board postponed the implementation of the commercial rate restructure for one year. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges.”

**Renewable Options.** SMUD’s customers have been increasingly interested in distributed energy resources, mainly through the installation of solar systems. In 2007, SMUD received 39 applications for customer-owned solar connections. As of January, 2022, approximately 40,400 of SMUD’s residential and commercial customers, approximately 6% of retail customers, had installed solar systems, representing approximately 280 MW of solar installations.

As the cost of energy storage continues to decline, SMUD anticipates an increase in behind-the-meter energy storage, mainly through the installation of battery storage systems. As of January 2022, approximately 611 of SMUD’s residential and commercial customers, approximately 0.01% of retail customers, had installed storage systems, representing approximately 4.4 MW of storage.

As another option for solar, SMUD’s SolarShares® (“SolarShares”) pilot program is a cost-effective and convenient way for commercial customers to meet their energy needs from solar power. The SolarShares program offers SMUD commercial customers the opportunity to receive solar power without upfront costs or equipment installation through 5, 10 or 20 year purchase contracts. These customers can receive up to half of their power from a utility-scale solar system. SMUD supplies solar power for the SolarShares program either by building and maintaining utility-scale solar systems or by procuring solar power from third parties through power purchase agreements. The SolarShares generation was approximately 3.0% of retail sales in 2021. As of April 30, 2021, SMUD had completed the SolarShares pilot program and is not entering into new SolarShares contracts.

Since January 2020, the California Building Code has required all newly constructed residential buildings under three stories to be powered by photovoltaic solar systems. A new home satisfies this requirement if it installs on-site solar or participates in an approved community solar or energy storage program. In February 2020, SMUD obtained approval from the California Energy Commission (“CEC”) to administer its own community solar program, called Neighborhood SolarShares® (“Neighborhood SolarShares”). SMUD’s Neighborhood SolarShares program can be used by developers of new low-rise residential buildings to satisfy the mandatory solar requirement. See also “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Rooftop Solar Mandate.” Starting in 2023, the California Building Code’s mandatory solar requirement will extend beyond low-rise residential properties, and other changes to the California Building Code’s community solar regulations will take effect. SMUD will revise its program to align with the new regulations and seek approval from the CEC to continue offering its Neighborhood SolarShares compliance option to newly constructed low rise residential homes in its service territory.

In addition to SolarShares and Neighborhood SolarShares, SMUD maintains a voluntary green energy pricing program called Greenergy® (“Greenergy”). The Greenergy program allows customers the opportunity to pay an additional amount per month to ensure that either all or part of their electricity comes
from green energy sources. In 2021, the program allocated Renewable Energy Credits (“RECs”) equivalent to approximately 6% of retail sales to its participating customers.

Energy Efficiency. To further assist customers in managing energy usage and reducing regional carbon emissions and air pollution, SMUD offers an extensive array of energy efficiency and building electrification programs and services including financial incentives, loans, energy audits and education. In addition, SMUD has partnered with local developers to incorporate energy efficiency and all-electric construction measures into new residential and commercial construction, which helps developers plan and design efficient, cost-effective and low or zero-emission buildings. As part of SMUD’s 2019 Integrated Resource Plan (“IRP”), SMUD set a goal for regional carbon emissions through transport and building electrification that aims to reduce carbon emissions in buildings and transport by 64% over the next 20 years. SMUD’s focus on electrification is continued in the Zero Carbon Plan (defined and discussed below). SMUD was the first electric utility in the country to set its efficiency goals based on carbon reductions, allowing building electrification and energy efficiency to both count toward meeting SMUD’s efficiency goals. This is a significant opportunity, as converting a typical home today to all-electric saves more than three times the carbon emissions compared to doing a major energy efficiency upgrade alone to the same building. See “POWER SUPPLY AND TRANSMISSION – Projected Resources.”

Sustainable Power Supply and Transmission

Maintaining a sustainable power supply entails focusing efforts on researching, promoting and implementing new renewable energy technologies and sources to meet SMUD’s long-term commitment to reducing carbon emissions and providing a reliable energy supply. SMUD defines a sustainable power supply as one that reduces SMUD’s GHG emissions to serve retail customer load to zero by 2030. See “2030 Zero Carbon Plan” below. SMUD is planning to achieve zero GHG emissions to serve retail customer load through investments in energy efficiency, clean distributed energy resources, renewables portfolio standard (“RPS”) eligible renewables, energy storage, large hydroelectric generation, clean and emissions free fuels, and new technologies and business models. Additionally, SMUD plans to continue pursuing GHG emissions reductions through vehicle, building and equipment electrification. At the same time, SMUD’s plans for maintaining a sustainable power supply include assuring the reliability of SMUD’s electric system, minimizing environmental impacts on land, habitat, water and air quality, and maintaining competitive rates relative to other electricity providers in the State.

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills regulate GHG emissions and encourage greater investment in energy efficiency and sustainable generation alternatives, principally through more stringent RPS. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings” herein.

2030 Zero Carbon Plan. In July 2020, the Board declared a climate emergency and adopted a resolution calling for SMUD to take significant and consequential actions to reduce its carbon footprint by 2030. On April 28, 2021, the Board approved SMUD’s 2030 Zero Carbon Plan (the “Zero Carbon Plan”). The Zero Carbon Plan is intended to be a flexible roadmap for SMUD to eliminate carbon emissions from its electricity production by 2030 while maintaining reliable and affordable service. To achieve these goals the Zero Carbon Plan is focused on four main areas: natural gas generation repurposing, proven clean technologies, new technologies and business models and financial impacts and options. SMUD plans to revisit the Zero Carbon Plan annually.

The natural gas generation repurposing focus of the Zero Carbon Plan calls for exploring the retirement of two of SMUD’s five Local Gas-Fired Plants (as defined herein) and the retooling of the other three Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants.” Based on SMUD’s studies to date, SMUD estimates that SPA
McClellan (as defined herein) can be retired by 2024 and that the SPA Project (as defined herein) can be retired by 2025. Final decisions about the retirement of these two Local Gas-Fired Plants will be based on additional reliability studies and engagement with the community. As part of the Zero Carbon Plan, SMUD is also exploring converting the CVFA Project (as defined herein) and the SCA Project (as defined herein) to standby operations only and investigating the use of alternative fuels like Renewable Natural Gas-biomethane (RNG-biomethane), hydrogen and other biofuels for the CVFA Project, SCA Project, and SFA Project (as defined herein). In addition, SMUD is investigating long duration energy storage strategies for the SFA Project. All final generator configurations are subject to reliability assessments.

The proven clean technologies focus of the Zero Carbon Plan calls for SMUD to procure approximately 1,100 to 1,500 MW of local utility-scale solar photovoltaic (“PV”) generating capacity, 700 to 1,100 MW of local utility-scale battery storage, 300 to 500 MW of wind generating capacity, 100 to 220 MW of geothermal generating capacity, and 100 MW of regional utility-scale solar PV generating capacity. The Zero Carbon Plan also estimates that customer installation of approximately 500 to 750 MW of behind-the-meter solar PV generating capacity and approximately 50 to 250 MW of behind-the-meter battery storage will assist SMUD with achieving the Zero Carbon Plan goals.

With respect to new technologies and business models, the Zero Carbon Plan focuses on evaluating, prioritizing and scaling the emerging technologies that SMUD expects will have the largest impact on reducing carbon in SMUD’s 2030 resource mix. SMUD is currently focused on four main areas of technology: electrification, education and demand flexibility, virtual power plants and vehicle-to-grid technology, and new grid-scale technologies. The Zero Carbon Plan forecasts that customer-owned resources and SMUD customer-focused programs will contribute between 360 and 1,300 MW of capacity to SMUD’s grid by 2030.

The financial impacts and options focus of the Zero Carbon Plan aims to keep SMUD rate increases at or below the rate of inflation while achieving SMUD’s goal of eliminating carbon emissions from its power supply by 2030. To pay for the expected costs of the Zero Carbon Plan and keep rate increases at or below the rate of inflation, the Zero Carbon Plan estimates the need for SMUD to realize between $50 million and $150 million of sustained annual savings. SMUD currently plans to achieve these sustained annual savings by exploring the implementation of operational savings strategies and pursuing partnership and grant opportunities.

While the ultimate impacts of the Zero Carbon Plan on SMUD’s financial results and operations are difficult to predict and are dependent on a variety of factors, such as the relative cost of procuring energy from clean technologies, the availability and relative cost of new technologies, and the adoption and implementation of energy efficiency and other measures by SMUD’s customers, such impacts could be material.

**Renewable Energy and Climate Change.** The California Renewable Energy Resources Act, established by Senate Bill X1-2 (“SBX1-2”) and the Clean Energy and Pollution Reduction Act of 2015, enacted by Senate Bill 350 (“SB 350”) require that SMUD meets 33% of its retail sales from RPS-eligible renewable resources by 2020 and 50% of its retail sales from RPS-eligible renewable resources by 2030. Senate Bill 100 (“SB 100”), passed by the legislature and approved by then-Governor Brown on September 10, 2018, accelerates the RPS targets and establishes a new 60% target by 2030. The bill also creates a planning goal to meet all of the State’s retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Renewables Portfolio Standards” for a discussion of the State RPS requirements.
SMUD’s compliance with State RPS requirements is evaluated over 3 or 4-year compliance periods. SMUD met the State RPS requirements for the first compliance period (2011-2013) and second compliance period (2014-2016). The third compliance period (2017-2020) required SMUD to source one-third of its energy from renewable resources, and SMUD had sufficient RECs to meet the third compliance period requirements. SMUD filed its 2020 and third compliance period RPS compliance report with the CEC in the second quarter of 2021 and is awaiting verification of its submission from the CEC which is expected to occur by the end of 2022. As of the end of the third compliance period (2020), SMUD had approximately 1.0 million surplus RECs available to help meet future RPS targets. SMUD expects to file its 2021 RPS compliance report by July 1, 2022, and has sufficient resources purchased in 2021 and surplus RECs to meet the 2021 RPS target (35.75%). In addition to meeting RPS standards, SMUD serves an additional 9% of its customer load with renewable energy through its voluntary SolarShares and Greenergy pricing programs. SMUD estimates that it has sufficient renewable energy deliveries, new power supply contract commitments, new power supply commitments under active discussion, and RPS-eligible surplus carryover to meet its RPS requirements through 2025. Additional solicitations currently under way are expected to provide sufficient RPS-eligible resources to cover SMUD’s RPS requirements through 2028. The resources needed to meet SMUD’s 2030 Zero Carbon Plan goals are expected to cover SMUD’s RPS obligations through at least 2030. The following chart illustrates SMUD’s current RPS requirements through 2030 and its existing and committed resources, and its resources under active discussion that are expected to be utilized to meet those requirements.

In addition to procuring new sources, meeting the RPS requirements will require replacement of certain existing renewable contracts which expire in future years. While SMUD anticipates it will meet much of its renewable resource requirements through purchase contracts with third parties, it continues to
explore additional options, including wind, solar, biomass, and geothermal developments, partnering with other utilities on future projects, and local development options. SMUD’s resource forecast (see “POWER SUPPLY AND TRANSMISSION – Projected Resources”) accounts for future renewable resources as a component of “Uncommitted Purchases.” To meet SMUD’s Zero Carbon Plan goals, SMUD anticipates meeting loads in 2030 with approximately 70-80% renewable resources, in addition to hydro and other new zero carbon technologies. See “- 2030 Zero Carbon Plan” above.

Given the intermittent nature of power from renewable resources such as wind and solar, SMUD is exploring and investing in options that provide the flexibility to manage the intermittency of such renewable resources. Potential options include energy storage resources, which SMUD has committed to as part of the 2030 Zero Carbon Plan, and expanding load management resources. Additionally, on April 3, 2019, SMUD, through its membership in BANC, a joint exercise of powers agency formed in 2009, and currently comprised of SMUD, the Modesto Irrigation District (“MID”), the City of Roseville (“Roseville”), the City of Redding (“Redding”), the City of Shasta Lake and the Trinity Public Utilities District has commenced its participation in the California Independent System Operator Corporation (“CAISO”) energy imbalance market (“EIM”). Participation in the EIM benefits SMUD by providing it with broader access to balancing resources within the region to help manage its expanding renewable portfolio. In addition, other entities within the BANC Balancing Authority Area began participation in the EIM on March 25, 2021. See “BUSINESS STRATEGY – Serving SMUD’s Customers – Operational Independence and Local Control” and “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

In 2018, SMUD’s Board adopted a new IRP through a comprehensive public process and filed the approved IRP with the CEC on April 29, 2019 pursuant to the CEC’s IRP guidelines. The approved IRP calls for a reduction in GHG emissions from SMUD’s energy supply by more than 60% by 2030 relative to 1990 levels and a goal of net zero emissions by 2040 due, in part, to a significant investment in electrification of the local building and transportation sectors. The IRP was expected to reduce Sacramento’s economy-wide GHG emissions by 70% relative to current levels. SMUD’s Zero Carbon Plan, adopted in 2021, built upon the 2018 IRP and set a goal of zero carbon emissions by 2030. SMUD is currently working to update its IRP filing with the CEC to incorporate the updated goals set in the 2030 Zero Carbon Plan pursuant to the CEC’s IRP guidelines. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

The State’s carbon cap-and-trade market established pursuant to Assembly Bill 32 (“AB 32”) began in 2013. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Greenhouse Gas Emissions” for a discussion of AB 32 and the State’s cap-and-trade program. SMUD anticipates that allowances allocated to SMUD will nearly equal SMUD’s compliance obligations under normal water year conditions. Under low water year conditions, SMUD may need to purchase additional allowances to cover its compliance obligations, including carbon obligations related to wholesale energy sales from SMUD’s natural gas power plants. As SMUD implements its clean power goals, SMUD expects its need for these allowances to decline.

There is scientific consensus that increasing concentrations of GHG have caused and will continue to cause a rise in temperatures in the State and around the world. The change in the earth’s average atmospheric temperature, generally referred to as “climate change,” is, among other things, expected to result in a wide range of changes in climate patterns, including increases in the frequency and severity of extreme weather events, including droughts and heat waves, more frequent incidences of wildfires, changes in wind patterns, sea level rise and flooding, any of which alone or in combination could materially adversely affect SMUD’s financial results or operations. See also “FACTORS AFFECTING THE REGION” and “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Other Factors.” As described above, SMUD is actively working to meet its sustainable power supply goals,
reduce its own GHG emissions, and assist the local governments in the territory it serves with their desired GHG reductions. In 2016, SMUD introduced the Pilot Natural Refrigerant Incentive Program, its first customer program providing incentives for GHG reduction in addition to kWh savings. SMUD is a founding member and active participant in the Capital Region Climate Readiness Collaborative, a public private partnership formed to better understand and plan for climate impacts expected in the region. SMUD is also an active member of the United States Department of Energy (the “DOE”) Partnership for Energy Sector Climate Resilience. SMUD regularly reviews scientific findings related to climate change and in 2016 published its Climate Readiness Assessment and Action Plan.

**Energy Storage Systems.** Assembly Bill 2514 (“AB 2514”) requires the Board to re-evaluate energy storage goals every three years. In compliance with AB 2514, the Board established a target of 9 MW of energy storage procurement by December 31, 2020, which SMUD has procured. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Energy Storage Systems” for further discussion of AB 2514. In September 2020, the Board directed that energy storage forecasts be implemented through SMUD’s IRP process going forward. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Renewable Energy and Climate Change” above for a discussion of SMUD’s IRP. SMUD is also evaluating how to couple utility-scale solar with utility-scale storage to support future system reliability needs and renewable energy goals.

**Meeting Peak Load.** A significant consideration for SMUD will be how it addresses its system peak load. SMUD has implemented programs and tools, such as advanced metering, energy efficiency options, and TOD rates for residential customers, to help customers manage their costs while helping SMUD reduce its peak load. Analysis of 2021 data showed a reduction of approximately 125 MW, not weather adjusted, for residential customers during the TOD peak period (5-8 p.m. local time). SMUD staff will continue to monitor the progress and results of the implementation of TOD rates and will use this information to inform future rate actions and load forecasts. See “BUSINESS STRATEGY – Serving SMUD’s Customers – Time-of-Day Rates.”

On September 16, 2021, the Board approved an optional residential Critical Peak Pricing rate (the “Peak Pricing Rate”), which will go into effect June 1, 2022. The Peak Pricing Rate is designed to reduce load by increasing the price of energy when the grid is most impacted, up to 50 hours per summer. In exchange, customers on the rate will receive a per kWh discount on summer Off-Peak and Mid-Peak rates. SMUD is also exploring the use of more distributed energy resources and demand response programs that could further reduce SMUD’s system peak.

**Operational Independence and Local Control.** A key component of SMUD’s business strategy is focused on maintaining its independence in operating and maintaining its resources. As such, SMUD has taken a number of actions to mitigate the potential impacts of various federal and state regulatory actions. For example, in 2002 SMUD established itself as an independent control area (now termed “Balancing Authority”) within the Western Electricity Coordinating Council (“WECC”) region. By removing itself from CAISO’s Balancing Authority area, SMUD became responsible for balancing electric supply and demand within its own service territory. This move substantially reduced fees paid to CAISO, preserved operational flexibility and helped to insulate SMUD from the uncertain regulatory environment and tariff structure of CAISO. In addition to decreased financial risks, this independence also reduced SMUD’s exposure to the impacts of capacity and energy shortages in the CAISO Balancing Authority area. Further, as an independent Balancing Authority, SMUD continued to support the statewide electric grid in events of electrical emergencies requiring rotating outages, such as loss of major transmission lines or equipment, as provided in the statewide emergency plan. By 2006, the SMUD Balancing Authority footprint expanded north to the California-Oregon border and south to Modesto, to include the service areas of the WAPA, MID, Redding and Roseville, and TANC -owned 340-mile 500-kV California-Oregon Transmission Project (“COTP”). In October 2009, SMUD, with the coordination and cooperation of WAPA, joined the
Northwest Power Pool Reserve Sharing Group, which supports reliability and reduces operating costs. In May 2011, BANC assumed the role of the Balancing Authority, though SMUD continues to oversee operation of the grid on behalf of BANC. BANC members share cost responsibility for balancing authority-related compliance obligations, liabilities, and operations. BANC also serves as an important venue for SMUD and other BANC members to collaborate with respect to operational and market improvements inside the BANC footprint and to preserve their operational independence. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.” On April 3, 2019, SMUD, through its participation in BANC, began operating in the CAISO EIM, which will help SMUD better manage the integration of renewable energy resources. The CAISO EIM is a voluntary market, which allows SMUD to maintain its operational independence from the CAISO, while providing SMUD greater access to balancing resources throughout the western region. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

FERC Order 1000. In 2011, the Federal Energy Regulatory Commission (“FERC”) issued Order 1000, which mandates regional transmission planning and imposes a regional cost allocation methodology for transmission facilities. FERC states that it has the authority to allocate costs to beneficiaries of transmission services even in the absence of a contractual relationship between the owner of the transmission facilities and the beneficiary. Despite appeals challenging FERC’s authority on a number of grounds, the D.C. Circuit Court of Appeals upheld Order 1000. See “DEVELOPMENTS IN THE ENERGY MARKETS – Federal Legislation and Regulatory Proceedings – Federal Regulation of Transmission Access.” Nevertheless, there remains flexibility with respect to SMUD’s participation in regional transmission planning. Specifically, SMUD is voluntarily participating as a Coordinating Transmission Owner (“CTO”) in the WestConnect transmission planning organization, and will rely on its WestConnect membership to keep it Order 1000 compliant. While SMUD opposes any cost allocation methodology that would obligate SMUD to pay for facilities that it does not use or need to maintain reliable operations or serve its load, the FERC-approved WestConnect planning process does provide a CTO the option to not accept an allocation of costs. WestConnect is composed of utility companies providing transmission of electricity in a portion of the western United States, working collaboratively to assess stakeholder and market needs and develop cost-effective enhancements to the western wholesale electricity market. SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally.

Electricity, Natural Gas, and Related Hedging

SMUD continues to utilize a comprehensive and integrated power and fuel supply strategy to acquire a reliable and diversified portfolio of resources to meet existing and future needs. This strategy includes a combination of both physical supply and financial hedging transactions to reduce price risk exposure over a five-year horizon. SMUD’s physical supply arrangements include ownership of power generating resources, as well as a diversified portfolio of power and fuel supply purchase contracts that range in duration, with a mixture of fixed and variable pricing terms.

With regard to the power purchase contracts, SMUD has entered into a series of contracts for the purchase of electricity to supply the portion of its resource needs not already provided by owned resources. SMUD also actively manages its exposure on variable rate electricity purchases, and at times may enter into financial contracts to fix prices by using options to reduce price risk, in each case when warranted by economic conditions. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements.”

With regard to fuel supply contracts, SMUD utilizes a similar strategy of employing financial contracts of various durations to hedge its variable rate fuel supply contracts. As of March 31, 2022, these contracts are forecasted to have hedged the price exposure on approximately 68%, 70% and 65% of SMUD’s anticipated natural gas requirements for 2022, 2023 and 2024, respectively. While the financial
effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted. See “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Supply.”

As provided in SMUD’s natural gas contracts, SMUD may be required to post collateral to various counterparties. As of April 15, 2022, SMUD did not have any collateral posting obligations. A decrease in natural gas prices could result in a collateral posting by SMUD. While the posting of collateral is not an expense for SMUD, it does temporarily encumber unrestricted cash balances.

To hedge against hydroelectric production volatility of SMUD-owned hydroelectric facilities, SMUD implemented a pass-through rate component called the Hydro Generation Adjustment (the “HGA”). The HGA and the associated Hydro Rate Stabilization Fund (the “HRSF”) help to offset increased power supply or fuel supply costs in years where precipitation levels at SMUD-owned hydroelectric facilities are low. To hedge against variations in the volume of energy received from non-SMUD-owned hydroelectric resources, SMUD uses a rate stabilization fund to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

Managing Risks

SMUD maintains an Enterprise Risk Management (“ERM”) program, a strategic approach to managing enterprise-wide risks as a portfolio, to help reduce the chance of loss, create greater financial stability and protect SMUD resources. It is designed to maintain an early warning system to monitor changes in, and the emergence of, risks that affect the organization’s business objectives. Under the purview of the Enterprise Risk Oversight Committee, composed of executive members and chaired by the Chief Financial Officer, ERM conducts ongoing risk identification, assessments, monitoring, mitigation, risk-based budgeting and reporting. To ensure accountability and oversight, each identified risk is assigned to an executive-level risk owner. Risk status and mitigation efforts are reported monthly to the Board.

Competitive Challenges

In the coming decade, utilities like SMUD may face competition from companies in other industries looking to diversify into the energy sector. Examples of developing competitive areas include retail sale of electricity, distributed electric storage resources, renewable distributed generation (mostly solar in Sacramento), customer installation of fuel cells, third-party electric vehicle charging, home or business automation that enables greater customer participation in energy markets, and third-party provision of energy management software and solutions.

SMUD has a wide range of initiatives to monitor and adapt to changing market conditions and new industry participants. Key areas of focus include:

- **Enhancing customer experience.** Recognizing the importance of meeting customer expectations, SMUD introduced the Customer Experience Strategy in 2016 to provide customers “value for what they pay” and further strengthen customer loyalty. The initiative is focused on ensuring SMUD has the people, systems, technology, programs and services to consistently meet or exceed customers’ changing expectations. The customer experience is measured via surveys with the goal of achieving and maintaining at least 70% of customers agreeing that SMUD provides them with value for what they pay by 2024.

- **Restructuring electric rates.** In 2017, the Board approved TOD rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018, and the full transition was completed in the fourth quarter of 2019. All of SMUD’s business customers are also on time-based rates. In 2019, the Board approved a
restructuring of commercial rates to collect a greater portion of fixed costs through fixed charges and to better align time periods and prices with energy markets. The commercial rate restructuring was delayed by one year due to the impacts of the COVID-19 pandemic. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges” and “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”

- Ongoing integrated resource planning. SMUD monitors and updates its integrated resource planning to ensure future sources of energy balance cost, reliability and environmental requirements with the flexibility to meet challenges of changing market and regulatory conditions, customer energy resources, and emerging technologies.

Leveraging Core Competencies

In addition to these initiatives, SMUD is leveraging core competencies to improve industry safety and help communities serve their customers’ energy needs.

Sacramento Power Academy. SMUD is leveraging its significant experience in training skilled line-workers with the opening of the SMUD Power Academy regional training center in 2016. The academy currently emphasizes training for public power, customer-owned utility employees. There are currently approximately 2,000 customer-owned utilities in the United States that are similar to SMUD, many of which may not have the resources to adequately train their employees. In addition to line-workers, the center will also train substation and network electricians. Other future plans include training electrical, telecom and meter technicians; engineers and designers; construction management inspectors; equipment operators; cable splicers and locators; and support staff.

Community Choice Aggregation. In 2002, Assembly Bill 117 was passed to establish Community Choice Aggregation in the State. SMUD sees the growth of Community Choice Aggregators (“CCAs”) as an opportunity to support organizations with values closely aligned with SMUD’s values, while also generating additional revenue for SMUD. CCA programs are proliferating in the State thanks to support for expanding renewable energy use and desire for local control particularly for electricity procurement. There are numerous CCAs operating in the State, and more are anticipated to launch in the future. CCAs are responsible for procuring wholesale power, setting the generation rate, and staffing a call center to handle opt-outs and questions about the power portfolio. The local investor-owned utility (“IOU”) continues to deliver electricity from the electric grid, maintain its electric infrastructure, bill customers and collect payments.

In October 2017, SMUD was selected by the governing board of Valley Clean Energy (“VCE”) to provide technical, energy and support services, including data management and call center services, wholesale energy services, and business operations support, to VCE for a five-year term. VCE is a joint powers agency formed in 2016 by the City of Woodland, the City of Davis and Yolo County to implement a local CCA program. The service territory expanded to include the City of Winters in 2021. The mission of VCE is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emissions reductions to its customers in Yolo County. VCE began electric services to its customers in the summer of 2018, giving Yolo County residents a choice between two electricity providers, VCE and PG&E.

In November 2017, SMUD was selected by the governing board of East Bay Community Energy (“EBCE”) to provide call center and data management services for a three-year term beginning in January 2018. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to
implement a local CCA program. EBCE expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021. SMUD signed a new contract with EBCE in January 2022 for another three years for call center and data management services.

In June 2019, SMUD was selected by the governing board of Silicon Valley Clean Energy ("SVCE") to provide program services to help local SVCE communities reduce carbon pollution while delivering engaging customer experiences. SVCE programs are focused on grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

While CCAs have had success in the State, they are susceptible to business, regulatory and other risks that could lead to a financial loss and/or result in a cessation of operations for the CCA. These risks could extend to a CCA’s counterparties, including SMUD. SMUD has made an effort to identify and mitigate potential counterparty risks to the extent possible in service agreements with the CCA’s described above. SMUD may pursue opportunities to provide similar services to additional CCAs in the future. SMUD management does not expect its current arrangements with VCE, EBCE, and SVCE to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

FACTORS AFFECTING THE REGION

Precipitation Variability

SMUD uses a National Weather Service precipitation station located at Pacific House, California to approximate available water supply to SMUD’s Upper American River Project (the “UARP”) hydropower reservoirs. As of March 31, 2022, precipitation at Pacific House, California totaled 37.14 inches for the October-September hydropower water supply period. This is 89% of the 50-year rolling median of 41.86 inches. Total reservoir storage in the UARP hydropower reservoirs was about 83% of capacity as of April 12, 2022, approximately 15% above historical average for this date. SMUD manages its reservoirs to maximize water storage going into the summer season, which preserves generating capacity during SMUD’s high load months and ensures that SMUD meets its UARP FERC license requirements, including requirements for recreational and environmental flows.

Although reservoir levels in the UARP are above historical averages, there remains the potential for wide swings in precipitation from year to year. In years with below average rainfall, SMUD may have to generate or purchase replacement energy at additional cost. To hedge against variations in the volume of energy received from SMUD-owned UARP hydroelectric resources, SMUD uses the HRSF to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

SMUD is also exposed to precipitation variability through its contract with the WAPA. In an average water year this contract provides roughly 661 gigawatt hours (“GWh”) of power, but the actual amount will vary depending on precipitation. Unlike the UARP, SMUD does not monitor precipitation stations to approximate power deliveries under the WAPA contract, and instead relies on a forecast of power deliveries from WAPA. As of March 31, 2022, WAPA has forecasted power deliveries of 348 GWh for 2022. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Western Area Power Administration.”
Wildfires

**General.** Wildfires in the State have become increasingly common and destructive. Frequent drought conditions and unseasonably warm temperatures have increased, and could further increase, the possibility of wildfires occurring in areas where SMUD maintains generation, transmission and distribution facilities. The number of diseased and dead trees has increased, and could further increase, this possibility. As a result, SMUD faces an increased risk that it may be required to pay for wildfire related property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), or may be disputed by insurers, and could be material. In addition, a significant fire or fires in SMUD’s generation, transmission or service area could result in damage or destruction to SMUD’s facilities, result in a temporary or permanent loss of customers or otherwise materially increase SMUD’s costs or materially adversely affect SMUD’s ability to operate its Electric System or generate revenues.

SMUD’s service territory is located within Sacramento County, which is located outside the California Public Utilities Commission (the “CPUC”) high fire threat areas, established in 2018. However, as described below, SMUD’s UARP facilities and certain of SMUD’s and TANC’s transmission facilities are within CPUC high fire threat areas. In addition, as described below, certain portions of SMUD’s service territory are located within the California Department of Forestry and Fire Protection (“Cal Fire”) Fire Protection and Resource Assessment Program (“FRAP”) Moderate, High and Very High Fire Hazard Severity Zones. SMUD’s exposure to liability for damages related to its UARP facilities, which are located within high fire threat areas in El Dorado County, is reduced due to risk mitigation measures adopted by SMUD and the low number of inhabitants and structures near the UARP facilities (See “Wildfire Mitigation” below). SMUD continues to take responsible action to minimize its exposure to liability from wildfires; however, under current State law, utilities can be held liable for damages caused by wildfires sparked by their equipment or other facilities regardless of whether the utility was negligent or otherwise at fault. Therefore, at this time the full extent of SMUD’s potential exposure to wildfire risk is unknown.

**Distribution (SMUD Service Territory).** Portions of SMUD’s service territory are located within Cal Fire’s FRAP Moderate, High and Very High Fire Hazard Severity Zones. State law requires Cal Fire to classify areas in the State based on the severity of the fire hazard that is expected to prevail there. These areas or “Fire Hazard Severity Zones” are based on factors such as fuel (material that can burn), slope and the expected chance of burning. There are three Fire Hazard Severity Zones (Moderate, High and Very High) based on increasing fire hazard. SMUD has assessed its service territory based on Cal Fire’s FRAP map, adopted in 2007; the following table illustrates SMUD’s assessment of the approximate extent of its service territory and retail customer base located within the three Fire Hazard Severity Zones.

<table>
<thead>
<tr>
<th>Fire Hazard Severity Zone</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres of SMUD Service Area</td>
<td>231,816</td>
<td>2,337</td>
<td>1,061</td>
</tr>
<tr>
<td>% of Total SMUD Service Area</td>
<td>40.6%</td>
<td>0.4%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Number of Retail Customers</td>
<td>40,114</td>
<td>3,688</td>
<td>136</td>
</tr>
<tr>
<td>% of Total Retail Customers</td>
<td>6.0%</td>
<td>0.6%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Transmission (Outside of SMUD Service Territory).** In 2018, the CPUC approved a new statewide fire map that identifies areas of elevated and extreme wildfire risk from utility-associated assets located throughout the State. SMUD directly participated in the development of the CPUC’s statewide fire map. In connection with the development of the CPUC’s statewide fire map, a peer review and a team of independent nationwide experts led by Cal Fire affirmed that SMUD’s electric service area is properly
located outside of these elevated ("Tier 2") and extreme ("Tier 3") high fire threat areas; however, SMUD’s UARP facilities are located within both Tier 2 and Tier 3 areas. According to the CPUC, Tier 2 fire-threat areas are areas where there is an elevated wildfire risk from utility assets and Tier 3 fire-threat areas are areas where there is an extreme risk from utility assets. As of June 8 2021, approximately 37 right-of-way mile of SMUD’s transmission lines are in Tier 2 fire-threat areas and approximately 19 right-of-way miles of SMUD’s transmission lines are in Tier 3 fire-threat areas. SMUD is also a member of TANC. As of July, 2021, approximately 116.3 right-of-way miles of TANC’s transmission lines are in Tier 2 fire-threat areas and approximately 4.5 right-of-way miles of TANC’s transmission lines are in Tier 3 fire-threat areas.

In accordance with its FERC license, SMUD adheres to a FERC-approved Fire Prevention and Response Plan for its UARP facilities. On May 17, 2018, in accordance with State law, SMUD’s Board of Directors determined that the UARP area may have a “significant risk of catastrophic wildfire” resulting from overhead electric facilities and that SMUD’s FERC-approved UARP Fire Prevention and Response Plan meets requirements for presenting wildfire mitigation measures to the Board for its approval.

Wildfire Mitigation. In response to potential wildfire risk, SMUD is implementing a series of measures intended to prevent wildfires from occurring, minimize the spread of any fire that does occur and improve the resiliency of its system. These measures include an increase in the degree of sophistication of fuel reduction inside and adjacent to rights-of-ways; installation of Cal Fire-approved exempt material to reduce the risk of sparking; enhanced inspection and maintenance programs; increased use of ignition-resistant construction, including covered conductors and undergrounding of conductors; increased monitoring of and identified responses to fire conditions, including operational procedures for the de-energization of lines during high fire conditions; and elimination of the use of automatic circuit reclosers on SMUD’s transmission lines and on SMUD’s distribution lines in certain areas during fire season.

SMUD’s proactive approach to vegetation management recently has been expanded to include the use of advanced technologies such as Light Detection and Ranging surveys, ortho and oblique that is used to pinpoint tree health and/or condition that may not yet be visible to the naked eye. In addition, SMUD has installed additional weather stations in transmission corridors and substations for increased situational awareness, and has continued coordination and collaboration with local agencies and first responders as well as vulnerable populations.

State legislation enacted in 2018 and 2019 requires publicly owned utilities (“POUs”) to prepare and present Wildfire Mitigation Plans to their governing boards by January 1, 2020, and annually thereafter. SMUD assembled an enterprise-wide team of subject-matter experts to prepare its plan in compliance with this legislation, released a draft of the plan for public comment, contracted for and obtained an independent evaluation of the comprehensiveness of the plan, and presented the plan and the evaluator’s report to the Board in the fourth quarter of 2019. The plan was adopted by the Board and submitted to the State Wildfire Safety Advisory Board (the “WSAB”) in 2020.

SMUD reviewed and updated its wildfire mitigation plan, released a draft of the updated wildfire mitigation plan for 2021 (the “2021 Wildfire Mitigation Plan”) for public comment, contracted for and obtained an independent evaluation of the comprehensiveness of the 2021 Wildfire Mitigation Plan, and presented the 2021 Wildfire Mitigation Plan and the evaluator’s report to the Board in the fourth quarter of 2020. Subsequent to this approval the WSAB issued a general set of recommendations for publicly owned electric utility wildfire mitigation plans. SMUD prepared a Supplement to its 2021 Wildfire Mitigation Plan (the “Supplement”) to respond to those recommendations and presented the Supplement to the Board in the second quarter 2021. The Supplement was adopted by the Board and SMUD submitted the 2021 Wildfire Mitigation Plan together with the Supplement to the WSAB in June 2021. The WSAB adopted its 2022 Guidance Advisory Opinion for POUs in February 2022 and SMUD has responded to all recommendations regarding SMUD’s Wildfire Mitigation Plan in the development of its draft Wildfire Mitigation Plan (“2022 Wildfire Mitigation Plan”). After completion of a noticed public comment process and qualified
independent evaluator review, the draft 2022 Wildfire Mitigation Plan will be presented to the Board and once adopted by the Board will be submitted to the WSAB by July 1, 2022. SMUD will continue to annually review and update its wildfire mitigation plan, conducting a comprehensive review at least every third year.

**Wildfire Insurance.** Wildfires in the State have not only increased potential liability for utilities, but have also adversely impacted the insurance markets, leading to higher costs for coverage; coverages becoming prohibitively expensive; limited or restricted coverage to certain types of risks; or coverage at insufficient levels. SMUD most recently renewed its general and wildfire liability insurance coverage on June 15, 2021. SMUD increased the commercially-insured portion of its $250 million wildfire coverage program from $173 million to $176 million and stayed within budgeted premium amounts. SMUD self-insures certain layers and quota share portions of the insurance tower up to $74 million.

In addition, it is expected that SMUD will have a portion of the $400 million aggregate principal amount of its commercial paper and line of credit program to provide operational flexibility in the event of the occurrence of a wildfire or other operational event. However, SMUD has not covenanted to maintain the availability of the commercial paper program and line of credit program for these purposes and no assurances can be given that the commercial paper and line of credit program will be available at the time of, or during, such an event.

**August 2020 Heat Wave**

The State experienced a prolonged above average temperature from August 14, 2020 through August 18, 2020. The CAISO was forced to institute rotating electricity outages in the State during this extreme heat wave. SMUD, as a member of BANC, did not have to implement any planned power disruptions. Additionally, SMUD was able to support the CAISO during some hours of the heat wave with both requested emergency assistance and wholesale market sales. SMUD’s peak demand between August 14, 2020 and August 18, 2020, varied between 2,874 MW and 3,057 MW, well below SMUD’s record peak of 3,299 MW.

**Impacts from COVID-19 Pandemic**

The COVID-19 pandemic has dramatically altered the behavior of businesses and people in a manner that has had, and continues to have, negative effects on global and local economies. SMUD is still experiencing the impact from COVID-19, but the impact on SMUD has lessened since the height of the pandemic in 2020. Compared to weather adjusted, pre-pandemic load levels, SMUD is currently experiencing an approximately 2%-3% increase in residential customer load and an approximately 3% decrease in commercial customer load, resulting in almost no change in net load. The commercial customers currently experiencing the largest impacts of the pandemic appear to be medium sized commercial customers while the smallest and largest commercial customers appear to have returned to pre-pandemic load levels or are exceeding them. SMUD anticipates that load recovery will continue over the next couple of years resulting in continued movement towards pre-pandemic levels, but not a complete recovery as people continue to work from home long-term.

In addition, as a result of the pandemic, many businesses have closed or reduced operations, unemployment has dramatically increased, many employees have been furloughed and/or shifted to reduced working hours and an increased number of SMUD’s customers have been, and could continue to be, unable to pay their electric bills. Part of the governmental response to the economic consequences of the pandemic required utility providers (including SMUD) to provide additional grace periods and flexible payment plans for the payment of utility bills or to refrain from pursuing collection remedies for unpaid bills for a period of time. SMUD had also implemented a no-shutoff policy through January 2022 under which SMUD would not disconnect power to a customer for non-payment of its electric bill. Beginning in February 2022, SMUD
resumed its normal payment, late fee, and disconnection process and began disconnections of unpaid accounts in late April 2022. As a result, SMUD has experienced an increase in delinquencies for customer electric accounts versus pre-pandemic levels. In January 2022, SMUD received $41 million from the California Arrearage Payment Program (“CAPP”) and the funds were applied to delinquent balances. As of April 9, 2022, the total delinquencies for customer electric accounts were $74.3 million, after the CAPP credit, which is an increase from the February 2020 balance of total delinquencies for customer electric accounts of $16.9 million. SMUD has also paused the recertification process for existing customers in SMUD’s low-income discount program. The number of customers participating in the low-income assistance program increased by 14,700, or approximately 14% from February 2020 to March 2022. Although low-income assistance customers increased, program costs decreased by $0.7 million in 2021 compared to 2019 due to a previously approved program restructuring.

SMUD’s actual 2021 revenue exceeded the 2021 revenue forecast. Revenue in 2022 and 2023 is expected to increase as customers shift back to pre-pandemic energy usage patterns. On September 16, 2021, the Board also approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. See “RATES AND CUSTOMER BASE – Rates and Charges – 2021 Rate Action.”

While the full effects of the pandemic and its related consequences on SMUD’s financial results and operations are difficult to predict, SMUD’s financial results or operations could be materially adversely affected. If the pandemic and its consequences are prolonged, again become more severe or another similar event occurs, the likelihood of adverse impacts could be increased.

**RATES AND CUSTOMER BASE**

**Rates and Charges**

SMUD’s Board of Directors has autonomous authority to establish the rates charged for all SMUD services. Unlike IOUs and some other municipal utility systems, retail rate and revenue levels are not subject to review or regulation by any other federal, State or local governmental agencies. Changes to SMUD rates only require formal action by the Board of Directors after two public workshops and a public hearing. SMUD is not required by law to transfer any portion of its collections from customers to any local government. SMUD typically reviews and sets rates on a two-year cycle.

**2019 Rate Action.**

On June 24, 2019, the Board approved a 3.75% rate increase effective January 1, 2020, a 3.00% rate increase effective October 1, 2020, a 2.50% rate increase effective January 1, 2021, and a 2.00% rate increase effective October 1, 2021, for all customer classes. Additionally, the Board approved a restructuring of the commercial rates, including new time periods and an overall increase in the fixed bill components, such as the System Infrastructure Fixed Charge and demand charges, and a corresponding decrease in energy charges, making the restructuring revenue neutral by rate category. To minimize bill impacts, rate categories will be restructured over an 8-year period. Customers were transitioned to the new rates in the first quarter of 2022. There is currently pending litigation concerning the adoption of the 2020 and 2021 rates. See “LEGAL PROCEEDINGS – Proposition 26 Lawsuit.”

Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board approved postponing the implementation of the commercial rate restructure for one year.
2021 Rate Action.

On September 16, 2021, the Board approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. Additionally, the Board approved the Solar and Storage Rate, the optional residential CPP rate, and updates to certain schedules of SMUD’s Open Access Transmission Tariff (“OATT”). The Board also approved a new timeline for the commercial rate restructure transition, and all impacted commercial customers were transitioned to the new rates by the end of the first quarter of 2022.

SMUD also implemented a solar interconnection fee based on the size of solar interconnection and supporting programs such as battery incentives, incentives to enroll in SMUD’s Critical Peak Pricing rate, battery incentives for Virtual Power Plants, and a program to bring the benefits of solar to under-resourced multi-family communities. These programs and fees are not subject to Board approval.

Rate Stabilization Funds

The Rate Stabilization Fund (the “RSF”) is maintained by SMUD to reduce the need for future rate increases when costs exceed existing rates. At the direction of the Board, amounts may be either transferred into the RSF (which reduces revenues) or transferred out of the RSF (which increases revenues). The Board authorizes RSF transfers on an event driven basis. The RSF includes funds to hedge variations in the volume of energy received from non-SMUD hydroelectric generation, variation in AB 32 revenue and variations in Low Carbon Fuel Credit (“LCFS”) revenue. As of March 31, 2022, the balance in the RSF was $137.5 million, approximately 8.8% of retail revenue.

Effective July 2008, SMUD implemented the HGA, which is a pass-through rate component to deal with variations in hydroelectric generation from the UARP (see “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Hydroelectric”). The HGA is designed to increase revenues in dry years when SMUD must buy power to replace hydroelectric generation and return money to the HRSF in wet years when SMUD has more hydroelectric generation than expected. Each year SMUD determines the impact of precipitation variances on projected hydroelectric generation from the UARP. When the precipitation variance results in a deficiency of hydroelectric generation from the UARP, transfers from the HRSF, which was created as a component of the RSF, to SMUD’s available cash, will be made in an amount approximating the cost to SMUD of replacement power (up to 4% of revenues) until the balance in the HRSF is zero. When the precipitation variance results in a projected surplus of hydroelectric generation from the UARP, deposits will be made into the HRSF in an amount approximating the positive impact to SMUD from the surplus hydroelectric generation (up to 4% of revenues) until the balance in the HRSF is equal to 6% of budgeted retail revenue (currently approximately $56 million). If the balance in the HRSF is not sufficient to cover transfers that would otherwise be made in the event of a projected deficiency in UARP hydroelectric generation, a 12-month HGA surcharge will automatically be included on customers’ electric bills at a level that generates up to 4% of retail revenue. If the balance in the HRSF is equal to 6% of budgeted retail revenue on any precipitation variance calculation date and the precipitation variance results in a projected UARP hydroelectric generation surplus, the positive impact of the surplus may be used for other purposes at staff’s recommendation, with the approval of the Board, including returned to customers through an electric bill discount up to 4% of retail revenue. SMUD calculates HRSF transfers based on an April-March (water year) precipitation period at Pacific House, California. This National Weather Service precipitation station is used to approximate available water supply to SMUD’s UARP hydropower reservoirs. As of March 31, 2022, precipitation at Pacific House, California totaled 38.34 inches which is below the 50-year rolling median of 50.52 inches.

As of March 31, 2022, the combined balance in the RSF and HRSF was $193.6 million. SMUD is forecasting a transfer of approximately $25.1 million out of the HRSF to SMUD’s available cash in April.
2022 due to below average precipitation, which will decrease the balance in the HRSF from $56.1 million to approximately $31.0 million. Although the HRSF and the subaccount of the RSF that hedge variations in the volume of energy received from non-SMUD hydroelectric generation currently have positive balances, continued below average precipitation could deplete the HRSF and RSF balances to zero.

**Low Income Discount**

As of March 2022, approximately 90,102 customers received the low-income discount offered by SMUD, which represents approximately 16% of all residential customers. SMUD monitors the program to ensure participants continue to be eligible for the discount. In 2021, the total discount was approximately $29.5 million. As a result of the effects of the COVID-19 pandemic and related economic downturn, SMUD experienced an increase in low-income discount applicants. See “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”

SMUD expanded its programs and services starting in 2016 to help customers with energy assistance, home improvement packages and education. SMUD is creating tailored solutions to best meet the needs of low-income customers. These solutions include free solar panels and inspecting homes to identify energy saving opportunities. As of March 2022, SMUD has performed 27,000 energy retrofits and, in partnership with Grid Alternatives (a non-profit organization that focuses on implementing solar power and energy efficiency for low-income families), 196 customers have benefited from free solar installations. Forty additional homes received solar and energy efficiency through a partnership with Habitat for Humanity of Greater Sacramento. As part of SMUD’s Zero Carbon Plan and the focus on building electrification, SMUD has also been ramping up electrification investments for low-income customers. Since 2019, SMUD has assisted more than 675 households with electrification upgrades.

[Remainder of Page Intentionally Left Blank]
Rate Comparisons

SMUD’s rates remain significantly below those of PG&E and other large utilities throughout the State. The following table sets forth the average charges per kWh by customer class for both SMUD and PG&E. PG&E’s rates reflect their recently approved rate effective March 1, 2022.

### AVERAGE CLASS RATES

<table>
<thead>
<tr>
<th>Class</th>
<th>SMUD Rates (cents/kWh)</th>
<th>PG&amp;E Rates (cents/kWh)</th>
<th>Percent SMUD is Below PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential – Standard</td>
<td>17.57¢</td>
<td>33.57¢</td>
<td>47.6%</td>
</tr>
<tr>
<td>Residential – Low Income</td>
<td>12.18¢</td>
<td>20.91¢</td>
<td>41.7%</td>
</tr>
<tr>
<td><strong>All Residential</strong></td>
<td><strong>16.73¢</strong></td>
<td><strong>29.16¢</strong></td>
<td><strong>42.6%</strong></td>
</tr>
<tr>
<td>Small Commercial (Less than 20 kW)</td>
<td>17.01¢</td>
<td>32.24¢</td>
<td>47.3%</td>
</tr>
<tr>
<td>Small Commercial (21 to 299 kW)</td>
<td>15.76¢</td>
<td>30.69¢</td>
<td>48.6%</td>
</tr>
<tr>
<td>Medium Commercial (300 to 499 kW)</td>
<td>14.59¢</td>
<td>29.75¢</td>
<td>50.9%</td>
</tr>
<tr>
<td>Medium Commercial (500 to 999 kW)</td>
<td>13.65¢</td>
<td>25.73¢</td>
<td>47.0%</td>
</tr>
<tr>
<td>Large Commercial (Greater than 1,000 kW)</td>
<td>11.45¢</td>
<td>20.08¢</td>
<td>43.0%</td>
</tr>
<tr>
<td>Lighting – Traffic Signals</td>
<td>13.46¢</td>
<td>31.39¢</td>
<td>57.1%</td>
</tr>
<tr>
<td>Lighting – Street Lighting</td>
<td>15.17¢</td>
<td>35.57¢</td>
<td>57.3%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>15.10¢</td>
<td>29.19¢</td>
<td>48.3%</td>
</tr>
<tr>
<td><strong>System Average</strong></td>
<td><strong>15.26¢</strong></td>
<td><strong>27.76¢</strong></td>
<td><strong>45.0%</strong></td>
</tr>
</tbody>
</table>

(1) Projected 2022 average prices for SMUD with rates effective October 1, 2021 and March 1, 2022.
(2) PG&E average prices in 2022 reflect rates effective March 1, 2022, per Advice Letter 6509-E dated February 18, 2022.
(3) The rates in the Average Class Rates table are calculated by dividing the total revenue of each class by the total usage of that class in kWh. The actual savings per customer will vary based on their electricity consumption.
The following table shows a comparison of SMUD’s charges for the average residential usage of 750 kWh per month (based on an average of summer and non-summer) and charges of seven similar neighboring or largest utilities in the State.

**STATEWIDE COMPARISON–RESIDENTIAL SERVICE**

<table>
<thead>
<tr>
<th>Utility</th>
<th>Monthly Billing Charge 750 kWh&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>Percent SMUD is (Below)/Above Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento Municipal Utility District&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$128.54</td>
<td></td>
</tr>
<tr>
<td>Pacific Gas &amp; Electric Company</td>
<td>$258.62</td>
<td>(50.3%)</td>
</tr>
<tr>
<td>Roseville Electric Utility</td>
<td>$116.20</td>
<td>10.6%</td>
</tr>
<tr>
<td>Turlock Irrigation District</td>
<td>$120.40</td>
<td>6.8%</td>
</tr>
<tr>
<td>Modesto Irrigation District</td>
<td>$134.53</td>
<td>(4.5%)</td>
</tr>
<tr>
<td>Southern California Edison Company</td>
<td>$172.74</td>
<td>(25.6%)</td>
</tr>
<tr>
<td>Los Angeles Dept. of Water &amp; Power</td>
<td>$217.72</td>
<td>(41.0%)</td>
</tr>
<tr>
<td>San Diego Gas and Electric Company</td>
<td>$306.45</td>
<td>(58.1%)</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Includes approved March 1, 2022 rates.

<sup>(2)</sup> Per individual utility’s published schedules as of March 1, 2022.

[Remainder of Page Intentionally Left Blank]
Allocation of Revenue by Customer Class

The following chart sets forth the forecast percentage of SMUD revenues from billed sales associated with each customer class.

[Diagram showing the allocation of revenue by customer class: Residential 49.4%, Large Commercial 14.7%, Medium Commercial 5.0%, Small Commercial 29.7%, Agriculture 0.7%, Lighting 0.5%]
Customer Base; Largest Customers

A stabilizing influence on SMUD’s revenues is that a substantial proportion is derived from residential customers (49.6% in 2021). Historically, revenue from commercial and industrial consumption has been more sensitive to economic fluctuation. Furthermore, SMUD has no dominant customers that account for a significant percentage of annual revenues. In 2021, no single customer contributed more than 3% of revenues. The top ten customers generated approximately 11% of revenues and the top 30 generated approximately 17%. The following table presents information on SMUD’s top ten customers as of December 31, 2021.

### SMUD’S LARGEST CUSTOMERS
(As of December 31, 2021)

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Annual Revenue ($ millions)</th>
<th>% of Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>$37.46</td>
<td>2.43%</td>
</tr>
<tr>
<td>Government</td>
<td>$32.42</td>
<td>2.10%</td>
</tr>
<tr>
<td>Government</td>
<td>$30.43</td>
<td>1.98%</td>
</tr>
<tr>
<td>Technology</td>
<td>$13.57</td>
<td>0.88%</td>
</tr>
<tr>
<td>Government</td>
<td>$13.20</td>
<td>0.86%</td>
</tr>
<tr>
<td>Communications</td>
<td>$9.89</td>
<td>0.64%</td>
</tr>
<tr>
<td>Industrial Gases</td>
<td>$9.07</td>
<td>0.59%</td>
</tr>
<tr>
<td>Grocery</td>
<td>$7.31</td>
<td>0.47%</td>
</tr>
<tr>
<td>Government</td>
<td>$7.22</td>
<td>0.47%</td>
</tr>
<tr>
<td>Government</td>
<td>$6.73</td>
<td>0.44%</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td><strong>$167.28</strong></td>
<td><strong>10.86%</strong></td>
</tr>
</tbody>
</table>

[Remainder of Page Intentionally Left Blank]
POWER SUPPLY AND TRANSMISSION

Power Supply Resources

The following table sets forth information concerning SMUD’s power supply resources as of March 31, 2022. Capacity availability reflects expected capacities at SMUD’s load center, as well as entitlement, firm allocations and contract amounts in the month of July, which is generally SMUD’s peak month.

### POWER SUPPLY RESOURCES
(As of March 31, 2022)

<table>
<thead>
<tr>
<th>Source:</th>
<th>Capacity Available (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generating Facilities:</strong></td>
<td></td>
</tr>
<tr>
<td>Upper American River Project – Hydroelectric</td>
<td>685</td>
</tr>
<tr>
<td>Solano Wind Project – Wind</td>
<td>120</td>
</tr>
<tr>
<td>Hedge Battery</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sub-total:</strong></td>
<td>809</td>
</tr>
<tr>
<td><strong>Local Gas-Fired Plants:</strong></td>
<td></td>
</tr>
<tr>
<td>SFA (Cosumnes)</td>
<td>570</td>
</tr>
<tr>
<td>CVFA (Carson-Ice)</td>
<td>103</td>
</tr>
<tr>
<td>SCA (Procter &amp; Gamble)</td>
<td>166</td>
</tr>
<tr>
<td>SPA (McClellan)</td>
<td>72</td>
</tr>
<tr>
<td>SPA (Campbell Soup)</td>
<td>170</td>
</tr>
<tr>
<td><strong>Sub-total:</strong></td>
<td>1,081</td>
</tr>
<tr>
<td><strong>Purchased Power:</strong></td>
<td></td>
</tr>
<tr>
<td>Western Area Power Administration (WAPA)</td>
<td>272</td>
</tr>
<tr>
<td>Grady – Wind</td>
<td>67</td>
</tr>
<tr>
<td>Iberdrola (PPM) – Wind</td>
<td>32</td>
</tr>
<tr>
<td>Feed-in-Tariff Photovoltaic – Solar</td>
<td>27</td>
</tr>
<tr>
<td>Rancho Seco Solar</td>
<td>73</td>
</tr>
<tr>
<td>NTUA Navajo Drew Solar</td>
<td>56</td>
</tr>
<tr>
<td>Recurrent – Solar</td>
<td>39</td>
</tr>
<tr>
<td>Wildflower Solar</td>
<td>11</td>
</tr>
<tr>
<td>CalGeo – Geothermal</td>
<td>26</td>
</tr>
<tr>
<td>Patua (Gradient/Vulcan) – Geothermal</td>
<td>12</td>
</tr>
<tr>
<td>Other Long-Term Contracts</td>
<td>18</td>
</tr>
<tr>
<td>ELCC Portfolio Adjustment</td>
<td>(53)</td>
</tr>
<tr>
<td>Firm Contract Reserves</td>
<td>14</td>
</tr>
<tr>
<td>Committed Short-Term Purchases</td>
<td>708</td>
</tr>
<tr>
<td>Uncommitted Short-Term Purchases</td>
<td>88</td>
</tr>
<tr>
<td><strong>Sub-total:</strong></td>
<td>1,366</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,255</td>
</tr>
</tbody>
</table>

---

(1) Available capacity is the net capacity available to serve SMUD’s system peak load during the month of July.
(2) Capacity values shown are based on resource effective load carrying capability modeling.
(3) Total includes SMUD’s Base Resource share and WAPA Customer allocations.
(4) Assumes firm reserves of 5% are included.
(5) Committed Short-Term Purchases are primarily purchased on a year-ahead to season-ahead basis from various sources.

Note: Totals may not add due to rounding.
Power Generation Facilities

**Hydroelectric.** The UARP consists of three relatively large storage reservoirs (Union Valley, Loon Lake and Ice House) with an aggregate water storage capacity of approximately 400,000 acre-feet and eight small reservoirs. Project facilities also include eight tunnels with a combined length of over 26 miles and eight powerhouses containing 11 turbines. In addition to providing clean hydroelectric power and operating flexibility for SMUD, the UARP area provides habitat for fish and wildlife and a variety of recreational opportunities, including camping, fishing, boating, hiking, horseback riding, mountain biking and cross-country skiing.

The combined capacity of the UARP is approximately 673 MW at SMUD’s load center in Sacramento. Under current licensing and mean water conditions, these facilities are expected to generate approximately 1,600 GWh of electric energy annually, which represents approximately 15% of SMUD’s current average annual retail energy requirements. In 1957, the Federal Power Commission (predecessor agency to FERC) issued a license to SMUD for the UARP. This 50-year license was subsequently amended to add and upgrade facilities and now includes all segments of SMUD’s hydroelectric facilities located on the South Fork of the American River and its tributaries upstream from the Chili Bar Project (described below). Before the original FERC license expired in 2007, SMUD reached a settlement agreement with federal and state regulatory land management agencies, nongovernmental organizations, and other interested stakeholders on proposed terms and conditions to be included in a new FERC license for the UARP. The settlement agreement was filed with the FERC on February 1, 2007.

On October 4, 2013 the California State Water Resources Control Board (the “SWRCB”) issued a 401 Water Quality Permit as required by the Clean Water Act, and on July 23, 2014 FERC issued a new 50 year license for the UARP. The new license followed the Settlement Agreement filed in 2007. The new license includes increases in environmental flow releases, and recreational flows at several locations. The estimated loss of generation is approximately 100 GWh per year and an additional $15 million of O&M and capital costs per year.

On June 16, 2021, pursuant to Board authorization, SMUD acquired the Chili Bar Hydroelectric Project which consists of a 7 MW powerhouse, reservoir, dam and spillway, north of Placerville on the South Fork of the American River for approximately $10.4 million (the “Chili Bar Project”). The Chili Bar Project is immediately downstream from the UARP and operates as the regulating reservoir for the UARP’s largest powerhouse. Owning the UARP and the Chili Bar Project enables SMUD to operate the two projects with a holistic approach to license compliance and generation efficiency.

**Solano Wind Project.** SMUD owns and operates a 102 MW wind project, located in Solano County, known as Solano Phases 1 and 2. Solano Phases 1 and 2 consist of 23 wind turbine generators (“WTG”) rated at 660 kilowatts (“kW”) each, and 29 WTGs rated at 3 MW each, respectively. Energy from the project is collected at 21 kV and transmitted over a dedicated 3-mile overhead system to the SMUD-owned Russell substation. At the Russell facility, the energy is transformed to 230 kV and interconnected to PG&E’s Birds Landing Switching Station. Energy deliveries are scheduled through the CAISO.

**Solano 3 Project.** In 2011 and 2012, SMUD constructed a 128 MW wind project adjacent to Solano Phases 1 and 2, known as Solano 3. The Solano 3 project consists of 55 WTGs rated at 1.8 MW and 3.0 MW, and interconnects at the Russell substation. The Solano 3 project was sold to Solano 3 Wind, LLC, a subsidiary of Citigroup, in December of 2011. The transaction included an option for SMUD to repurchase the Solano 3 project at year six, eight or fifteen. SMUD exercised its repurchase option at year six, and completed this transaction and transfer of ownership in April 2018.
**Solano 4 Project.** SMUD is developing the Solano 4 Wind Project. The Solano 4 Wind Project currently plans to utilize SMUD-owned land near the Solano 3 project, known as the Collinsville and Roberts properties, to install 10 WTGs rated at 4.5MW, and to remove the Solano Phase 1 turbines and replace them with 9 WTGs rated at 4.5 MW. In 2019, SMUD secured the wind rights on the Roberts property and removed the wind turbines on that property. SMUD received the Cluster II Phase I Study results from the CAISO in January 2019, provided the initial security posting in April 2019, and received the Phase II Study Report in November 2019, furthering the process towards a Large Generator Interconnection Agreement. SMUD has met all of the CAISO requirements and has executed a Large Generator Interconnection Agreement as of June 2021 that will allow for 90.8 MW of capacity at the point of interconnection. WAPA and PG&E identified upgrades needed to interconnect the Solano 4 Wind Project that may not be complete before 2024. The WAPA impacts have been resolved at no cost. PG&E has an approved project and expects to complete the needed upgrades by May of 2025. In April 2021, SMUD submitted an application for advisory review by the Solano County Airport Land Use Commission (the “Solano ALUC”) of the Solano 4 Wind Project’s consistency with the 2015 Travis Air Force Base Land Use Compatibility Plan (the “Travis Plan”). In May 2021, the Solano ALUC purported to resolve that the Solano 4 Wind Project was inconsistent with the Travis Plan. In August 2021, the Board approved the Project Environmental Impact Report, made findings overriding the Solano ALUC’s finding of inconsistency, made findings there was no alternative to the project, and approved the Solano 4 Wind Project. In addition, SMUD applied for and obtained extensions of the Federal Aviation Administration Determinations of No Hazard allowing for construction of the turbines. They remain valid as long as SMUD awards a contract by the end of July 2022. SMUD released the Request for Proposals to construct the Solano 4 Wind Project in May 2021 and has received bids and is working toward a contract award mid-2022. The expected operation date for the project is May 2024. Full project capacity may be delayed into the first quarter of 2025 due to the timeframe established for the PG&E required upgrades. SMUD has developed a mitigation plan for the limited interconnection capacity for the first year of operation, in coordination with CAISO and PG&E, of using all of the existing SMUD Solano Russell substation interconnection capacity combined to dispatch all the projects under. SMUD expects to complete the administrative process to allow for this by late 2022.

**Solar Photovoltaic.** SMUD owns and operates approximately 2 MW of solar photovoltaic generating facilities. These facilities include installations at the Hedge Substation property, SMUD Headquarters, the East Campus Operations Center, and other smaller photovoltaic systems throughout the service area on parking lots.

**Local Gas-Fired Plants.** SMUD constructed five local natural gas-fired plants in its service area: the CVFA Project, the SCA Project, the SPA Project, SPA McClellan and the SFA Project (each defined below). These five plants are referred to collectively as the “Local Gas-Fired Plants.” These plants are a strategic component of SMUD’s resource mix. In addition to providing SMUD a total capacity of approximately 1,139 MW, the Local Gas-Fired Plants provide SMUD with needed voltage support, operational and load following capability, and the reliability inherent in having power resources located close to loads. With the exception of SPA McClellan, these plants were financed through the issuance of project revenue bonds by separate joint powers authorities (collectively, the “Authorities”). In late 2021, ownership of all of the Local Gas-Fired Plants was transferred to one of the Authorities, SFA. SMUD has entered into long-term agreements with SFA providing for the purchase by SMUD of all of the power from each of the Local Gas-Fired Plants. This consolidation created operational and administrative efficiencies without changing any of the functionality of the power plants. Although the Local Gas-Fired Plants are owned by SFA, SMUD has exclusive control of their dispatch and manages their operations as part of its overall power supply strategy.

Payments under the power purchase agreements are payable from the revenues of SMUD’s Electric System prior to the payment of the principal of or interest on SMUD’s Senior Bonds and Subordinated
Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below), as are other maintenance and operation costs and energy payments. For further discussion of SMUD’s obligations to make these payments to SFA, see “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Joint Powers Authorities.”

The following is a brief description of the five Local Gas-Fired Plants:

*The Cosumnes Power Plant (the “SFA Project”).* The SFA Project is a 612 MW natural gas-fired, combined cycle plant located in the southern portion of Sacramento County adjacent to SMUD’s decommissioned Rancho Seco Nuclear Power Plant. Commercial operation of the SFA Project commenced on February 24, 2006. SFA increased the net generating capacity of the facility by 81 MWs via an Advanced Gas Path (“AGP”) upgrade. The additional AGP generation was realized after hardware and software upgrades were completed on both units in March of 2019. The SFA Project is owned by SFA, a joint powers authority formed by SMUD and MID. The existing take-or-pay power purchase agreement between SMUD and SFA expires no earlier than when the related bonds have been paid in full (the outstanding related bonds are scheduled to mature on July 1, 2030).

*The CVFA Carson Cogeneration Project (the “CVFA Project”).* The CVFA Project, a 103 MW natural-gas-fired cogeneration project consisting of separate combined cycle and peaking plants, provides steam to the Sacramento Regional County Sanitation District (“SRCSD”) wastewater treatment plant adjacent to the site. The CVFA Project was originally owned by the CVFA, a joint powers authority formed by SMUD and the SRCSD. Construction of the CVFA Project was completed and the plant began commercial operation on October 11, 1995. The CVFA bonds were defeased in September 2019. In late 2021, ownership of the CVFA Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the CVFA Project (the “CVFA PPA”) will be in effect until terminated by SMUD.

*The SCA Procter & Gamble Cogeneration Project (the “SCA Project”).* The SCA Project, a 182 MW natural gas-fired cogeneration facility, is located in an established industrial area of Sacramento. The initial combined cycle portion of the plant began commercial operation on March 1, 1997. Construction of the peaking plant portion of the SCA Project commenced during 2000 and the unit achieved commercial status on April 24, 2001. The SCA Project produces steam for use in Procter & Gamble Manufacturing Company’s oleochemical manufacturing processes and electricity for sale to SMUD. The SCA Project was originally owned by the SCA, a joint powers authority formed by SMUD and SFA, a separate joint powers authority. The SCA bonds were defeased in September 2019. In late 2021, ownership of the SCA Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the SCA Project (the “SCA PPA”) will be in effect until terminated by SMUD.

*The SPA Campbell Soup Cogeneration Project (the “SPA Project”).* The SPA Project, a 170 MW natural gas-fired cogeneration project, was completed and began commercial operations on December 4, 1997. Upgrades were implemented during 2000, which increased the plant’s peaking capacity to 180 MW, well above its net demonstrated capacity of 159.8 MW. The plant is located in south Sacramento adjacent to the Capital Commerce Center (formerly the Campbell Soup Company food processing facility). The SPA Project was originally owned by SPA, a joint powers authority formed by SMUD and SFA. The SPA bonds were redeemed in July 2015. In late 2021, ownership of the SPA Project was transferred to SFA. The power purchase agreement between SMUD and SFA relating to the SPA Project (the “SPA PPA”) covers both the SPA Project and SPA McClellan and will be in effect until terminated by SMUD. As part of the Zero Carbon Plan, SMUD is exploring retiring the SPA Project in 2025 pending a feasibility assessment. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”
The SPA McClellan Gas Turbine ("SPA McClellan"). SPA McClellan is a 72 MW natural gas-fired simple cycle combustion turbine generating plant at McClellan Business Park in Sacramento. This turbine is connected to SMUD’s electric system and is operated to meet SMUD’s peak-load requirements. SPA McClellan is aligned for remote starting and operation with both black start and fast start capabilities. SMUD constructed the McClellan unit in 1986 as a 50 MW emergency power source for the McClellan Air Force Base. In 2001, following the Air Force Base closure, McClellan was upgraded to 72 MW and converted for SMUD use. In May 2007, SMUD transferred ownership of the McClellan Gas Turbine to SPA for more efficient operation. SPA did not issue debt related to SPA McClellan. In late 2021, ownership of SPA McClellan was transferred to SFA. SFA passes all costs of operations and maintenance through to SMUD in accordance with the terms of the SPA PPA. In exchange for paying all costs related to SPA McClellan, SMUD receives all of the power generated thereby. As part of the Zero Carbon Plan, SMUD is exploring retiring SPA McClellan in 2024 pending a feasibility assessment. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

Fuel Supply

General. SMUD is obligated to arrange for the purchase and delivery of natural gas to the Local Gas-Fired Plants. Management of the natural gas procurement and delivery process is a key focus of SMUD’s reliability and risk policies. Although the natural gas consumption of the power plants for SMUD’s load can vary significantly depending on the season, precipitation, and the market price of power and natural gas, the plants are forecasted to need, on average in 2022, a total of approximately 96,000 Decatherms per day (“Dth/day”) with a daily peak slightly more than 171,000 Dth/day of natural gas. Due to a gradual decline in natural gas consumption, SMUD is forecasting consumption of approximately 75,000 Dth/day in 2024. SMUD has implemented a comprehensive strategy to secure a reliable and diversified fuel supply through a variety of agreements for the supply, transportation, and storage of natural gas.

Supply. SMUD hedges a significant portion of its expected gas needs to meet customer power requirements. This includes gas for the Local Gas-Fired Plants and for the Sutter Energy Center. See “Power Purchase Agreements – Sutter Energy Center”. This is accomplished through a combination of long-term supply arrangements and an exposure reduction program. The program consists of a primary rolling three-year exposure reduction component, as well as supplemental fixed calendar year components reaching out five calendar years. Long-term arrangements may consist of a combination of physical commodity supply contracts, financial hedges, or options. Natural gas is purchased from a wide variety of producers and marketers at the northern and southern California borders, at Alberta, Canada and from the San Juan and the Rocky Mountain supply basins. SMUD has a number of both fixed-price supply agreements and financial hedging contracts to fix gas costs ranging from one month to several years in duration. Including fixed price biogas contracts as of March 31, 2022, these contracts have hedged the price of approximately 68%, 70% and 65% of SMUD’s forecasted natural gas requirements for 2022, 2023 and 2024, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted.

SMUD has contracted with the Northern California Gas Authority No. 1 (“NCGA”) to purchase an approximate average of 8,700Dth/day over the remaining life of a contract expiring May 31, 2027 (the “NCGA Contract”). Under the NCGA contract, SMUD pays a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts. Currently the delivery point for the NCGA Contract is the AECO hub in Alberta. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. To increase delivery efficiencies, SMUD expects to exchange the gas delivered at the AECO hub under the NCGA Contract with gas delivered at the Malin receipt point beginning in 2023. SMUD has also contracted with the Northern California Energy Authority (“NCEA”) to purchase an approximate average of 22,000 Dth/day or to be converted to the approximate value in
MegaWatt-hours ("MWh") of electricity over the remaining life of a contract expiring on May 31, 2049. The gas will be delivered to the SMUD system via the Malin receipt point on the PG&E backbone system. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. SMUD will pay a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts.

**Renewable Natural Gas Supply.** As a component of meeting SMUD’s RPS goals, SMUD procures renewable natural gas and digester gas as fuels to generate renewable electricity from the SFA Project. Descriptions of the renewable natural gas supply agreements are provided below.

In March 2009, SMUD entered into a 15-year contract (that qualifies as renewable energy) with Shell Energy North America (US), L.P. ("Shell Energy") to purchase up to 6,000 Dth/day of renewable natural gas produced from a landfill project in Texas. SMUD began taking deliveries of this supply in April 2009. In March 2012, SMUD amended the contract with Shell Energy to increase the maximum volumes to 7,300 Dth/day and extended the term by 10 years to March 31, 2034. Currently, the delivery point is PG&E Topock and SMUD is using its long-term transport capacity to deliver it to the SFA Project. In 2016, SMUD entered into a 3-year contract with Shell Energy to sell back the entire volume of renewable natural gas purchased, less 500 Dth/day, to be sold into the vehicle transportation markets. Upon expiration of the initial 3-year contract for the sale of biogas to Shell Energy, SMUD extended the sell back of the entire volume of biogas for an additional 3 years with Element Markets, starting in 2020.

SMUD contracted with Heartland Renewable Energy, LLC ("HRE") in December 2009 for a 20-year supply of up to 7,000 Dth/day of renewable natural gas from a digester facility in Colorado. Deliveries began in March of 2014. Currently, the delivery point is Opal, Wyoming and SMUD uses its long-term transport capacity to deliver it to the SFA Project. HRE has not delivered volumes from the project to SMUD since December 2016 due to current litigation with Weld County, Colorado regarding odor and permit issues. EDF Renewables, the majority owner of HRE, notified SMUD in August of 2017 that it is in discussions with a short list of bidders to sell its interests in the facility. In June of 2020, the project was purchased and SMUD’s contract was assigned to the new owner, Platte River Biogas, LLC ("PRB"). SMUD and PRB terminated the contract in the third quarter of 2021.

In September 2011, SMUD and CVFA entered into a “Digester Gas Purchase and Sale Agreement” through which the CVFA Project cleans nearly all of the digester gas received from SRCSD and sells it to SMUD for delivery to the SFA Project. In return, SMUD pays all of the CVFA Project’s costs in acquiring, cleaning and making the gas available to SMUD. The Digester Gas Purchase and Sale Agreement expires in September 2025. In late 2021, the Digester Gas Purchase and Sale Agreement, along with the CVFA Project was transferred to SFA. The CVFA Project is currently receiving, processing and selling up to 1,500 Dth/day with provisions for volume increases over time to 2,500 Dth/day. Digester gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations.

In December 2011, SMUD entered into a 20-year agreement with EIF KC Landfill Gas LLC ("EIF") to purchase up to 7,050 Dth/day of renewable natural gas produced from multiple landfill projects. SMUD began taking deliveries of this supply in January 2014. Currently the delivery point is Kern River – Opal and SMUD uses its long-term transport capacity to deliver it to the SFA Project. Renewable natural gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations. In April 2022 SMUD entered into a transaction to sell the renewable natural gas purchased into the vehicle transportation markets. The transaction expires in March 2025.

AB 2196 is a law that defines the criteria by which existing and future renewable natural gas contracts will qualify for the State RPS program. The CEC adopted a RPS Eligibility Guidebook on April
30, 2013, which includes detailed rules for implementation of AB 2196. SMUD received an updated certificate of eligibility from the CEC in July 2014 for the SFA Project that included the quantities of renewable natural gas from all four contracts. The CEC adopted a revised RPS Eligibility Guidebook (Ninth Edition) on April 27, 2017. This latest guidebook did not change the RPS eligibility of any of the above SMUD renewable natural gas and digester gas contracts, but did simplify reporting requirements for these contracts. When fully delivering, these contracts represent roughly 30% of SMUD’s 2020 RPS requirement.

**Gas Transmission**

SMUD has satisfied its obligation to deliver natural gas to its power plants by constructing a natural gas pipeline, purchasing an equity interest in two PG&E backbone gas transmission lines, and contracting for capacity on a number of existing interstate natural gas transmission lines.

**The Local Pipeline**. SMUD constructed and owns a 20-inch, 50-mile natural gas pipeline in the greater Sacramento area (the “Local Pipeline”) that transports gas to all of the Local Gas-Fired Plants except SPA McClellan. The Local Pipeline is interconnected with PG&E’s major State gas transmission lines 300 and 401. Additionally, it may be interconnected with one or more private gas gathering pipelines located in the area, a gas storage project and/or other FERC approved pipelines that may be built in the local area. In conjunction with the construction of the SFA Project, SMUD extended the Local Pipeline to the plant site. The 26-mile extension was completed in 2004. The extension is 24 inches in diameter and was designed to serve both the SFA Project and an additional second phase, if constructed.

**PG&E Backbone Gas Transmission Lines 300 and 401**. In 1996, SMUD purchased an equity interest in PG&E’s backbone gas transmission lines 300 and 401 (referred to as the PG&E backbone). The total capacity acquired at that time was approximately 85,000 Dth/day and consisted of approximately 43,600 Dth/day of firm gas transport from the California–Oregon border at Malin, Oregon and 44,700 Dth/day from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California. SMUD was also entitled to a share of non-firm capacity, which was approximately 4,360 Dth/day; making the total capacity potentially available to SMUD almost 90,000 Dth/day. This purchase made SMUD a co-owner of the PG&E backbone gas transmission lines 300 and 401 and obligated SMUD to pay PG&E to operate the pipelines on its behalf subject to the terms of the purchase agreement and operating protocols. PG&E reduced operating pressures on Line 300 after PG&E suffered a natural gas explosion in San Bruno, CA in September of 2010. As a result of the reduced operating pressures on Line 300 and a related settlement between PG&E and SMUD, SMUD now holds a total capacity of approximately 88,000 Dth/day, consisting of approximately 47,620 Dth/day of firm gas transport from the California–Oregon border at Malin, and 39,233 Dth/day of firm gas transport from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California.

SMUD also holds additional backbone capacity under tariff service for 5,000 Dth/day of northern path (Redwood) capacity. This contract expires in June 2023.

**Kern River Gas Transmission Company Long Term Agreement**. SMUD has an agreement with Kern River Gas Transmission Company for 20,000 Dth/day of firm capacity through April 30, 2028. This capacity gives SMUD access to the Rocky Mountain supply basin at Opal, Wyoming, and connects to PG&E Line 300 (owned in part by SMUD) at Daggett, California.

**TransCanada Firm Transmission Service Agreements**. SMUD has several agreements with TransCanada Corporation that give SMUD access to Canadian supply from the Alberta basin to Kingsgate, British Columbia and the California-Oregon border at Malin. SMUD has agreements for 22,101 Dth/day
at the California-Oregon border at Malin via the Gas Transmission Northwest ("GTN") pipeline that expires in 2023. SMUD has agreements for approximately 12,000 Dth/day from the Alberta ANG/Foothills pipeline, also expiring in 2023. In order to match the Canadian capacity with the takeaway capacity at Malin, SMUD has an agreement with Foothills Pipeline for approximately 10,000 Dth/day that expires on October 31, 2022. Currently, SMUD is not planning to renew GTN, Alberta ANG/Foothills and Foothills Pipeline.

SMUD’s diversified portfolio of gas transmission arrangements allow for the purchase of gas from a variety of suppliers and locations, and the opportunity to capitalize on regional price differentials where possible. In addition, its ownership interest in the SMUD/PG&E backbone and Local Pipeline enhances the reliability of SMUD’s gas supply.

**Gas Storage**

SMUD also employs gas storage as part of its overall fuel supply strategy. Gas storage is useful in helping to balance gas supply, mitigate market price volatility, and provide a reliable supply to meet peak day delivery requirements.

SMUD also has a contract with Lodi Gas Storage, LLC, which began in April 2018 and expires in March 2023, for capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

SMUD has a second contract with Lodi Gas Storage, LLC, which began in April 2022 and expires in March 2024, for additional capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

**Power Purchase Agreements**

SMUD has a number of power purchase agreements to help meet its power requirements. Some of these agreements are described below.

**Western Area Power Administration.** Effective January 1, 2005, SMUD entered into a 20-year contract with WAPA. SMUD has entered into a replacement agreement extending the term by 30 years for the period of January 1, 2025 through December 31, 2054. Power sold under this contract is generated by the Central Valley Project ("CVP"), a series of federal hydroelectric facilities in northern California operated by the United States Bureau of Reclamation. The contract provides WAPA’s CVP Base Resource customers (including SMUD) delivery of a percentage share of project generation in return for reimbursement of an equivalent share of project costs. SMUD’s CVP Base Resource share is roughly 25% of project generation and costs. This is expected to be approximately 318 MW of capacity and 661 GWh of energy in an average water year but will vary depending on precipitation. Energy available under the contract is determined by water releases required for water supply and flood control and is then shaped into higher value periods within other CVP operating constraints. More capacity and energy are typically available in spring and summer months and less in fall and winter.

SMUD also has a contract with WAPA expiring December 31, 2024, by which WAPA delivers an additional 200-300 MW per hour from projects located in the Pacific Northwest based on certain contractual parameters. In 2021, SMUD received 1,100 GWh of energy under this contract.
Avangrid (formerly Iberdrola Renewables (“Iberdrola”)). SMUD has a contract with Iberdrola that provide SMUD with bundled renewable energy (energy plus RECs). The contract agreement is for 126 GWh of wind power generated in Solano County, California. The SMUD Board approved an extension of the wind contract through June 30, 2025.

Patua Project LLC. In April 2010, SMUD entered into a power purchase agreement with Patua Project LLC (“Patua”), a subsidiary of Gradient Resources, for the delivery of up to 132 MW (expected to be 120 MW nominal power output) of renewable energy from geothermal generation being developed in north central Nevada, from a Gradient Resources project known as the Patua Project. The project was to have been developed in three phases. Since 2010, the agreed upon capacity has been reduced several times. In December 2013, Phase 1 of the project, which had been reduced to 30 MW, finally achieved commercial operation. In 2014, the parties concluded negotiations on the fourth amendment to the power purchase agreement with Patua, which reduced the total capacity down to 40 MW, extended the commercial operation date of Phase 2 to January 1, 2016, and allowed Patua to add up to 13 MW of solar photovoltaics to supplement geothermal production. In addition, this amendment shifted responsibility to Patua for a portion of the long-term transmission service agreements that have been underutilized due to the project not meeting its targets. In November 2015, the Patua Project was acquired by TL Power, LLC, a wholly owned subsidiary of Cyrq Energy, Inc. (“Cyrq”). In December 2015, Cyrq terminated Phase 2. Upon termination of Phase 2, the contractual right for Cyrq to add solar photovoltaics to supplement geothermal production was reduced to 10 MW. As a result of poor performance during the first year of operation, SMUD reduced its obligation to take power from 30 MW to 25 MW. Performance continued to lag in 2015 and 2016 and SMUD further reduced its obligation to take power from 25 MW to 19 MW.

Renewable Energy Feed-In Tariff. In September 2009, SMUD’s Board authorized a feed-in tariff program for the purchase of renewable energy from local renewable energy projects connected to SMUD’s distribution system. SMUD’s Board authorized connection of up to 100 MW under the feed-in tariff which included standard payment rates and standard purchase terms for power. The feed-in tariff program became effective on January 1, 2010. Under the feed-in tariff, SMUD has executed 20-year term power purchase agreements for solar projects totaling 98.5 MW. Construction and start-up was completed on all projects between 2010 and 2012.

CalEnergy LLC. In August 2014, SMUD entered into a 22-year power purchase agreement with CalEnergy LLC for the purchase of 30 MWs per year of renewable energy from its Salton Sea geothermal facilities. As of July 1, 2017, SMUD began receiving up to 10 MWs from the CalEnergy portfolio, which escalated to the full 30 MWs on May 1, 2020.

Rancho Seco Solar. In October 2015, SMUD entered into a 20-year power purchase agreement with Rancho Seco Solar LLC for the purchase of energy from a 10.88 MW solar PV project sited on SMUD’s property at the closed Rancho Seco Nuclear Generating Station. Commercial operation was achieved in August of 2016. Rancho Seco Solar LLC leased the property from SMUD under a land lease agreement. The output of this project will directly serve two large commercial customers having executed agreements with SMUD for retail supply of solar power.

In May 2019, SMUD entered into a 30-year power purchase agreement for an additional 160 MW solar PV project with Rancho Seco Solar II, LLC. The project is located on SMUD-owned property at the closed Rancho Seco Nuclear Generating Station, adjacent to the existing 10.88 MW solar PV project. Construction began in 2019, and the project became commercially operable in February 2021.

Grady Wind Energy. In October 2015, SMUD entered into a 25-year power purchase agreement with Grady Wind Energy LLC (“Grady”) for the purchase of energy from a 200 MW wind project located in New Mexico (the “Grady Project”). The Grady Project began commercial operations on August 5, 2019.
Energy from the Grady Project is delivered to CAISO. SMUD purchases 100% of the Grady Project output which includes energy, renewable energy credits, and capacity attributes. SMUD and Grady have a short-term (6-month) agreement spanning the winter 2021-spring 2022 season wherein Grady has the option to pay SMUD to curtail up to 100 MW. This agreement does not affect the remaining term of the agreement.

**Great Valley Solar 2, LLC.** In January 2017, SMUD entered into a 20-year power purchase agreement with Great Valley Solar 2, LLC for the purchase of energy from a 60 MW solar PV project located in Fresno County, California. The project’s commercial operation date was December 28, 2017.

**ARP-Loyalton Cogen LLC.** On September 14, 2016, Senate Bill 859 (“SB 859”) was signed into law. Under SB 859, POU must procure its proportionate share of 125 MWs of renewable energy from biomass plants burning high hazard forest fuels, subject to terms of at least five years. Seven POUs (SMUD, MID, Turlock Irrigation District (“TID”), Anaheim Public Utilities, Imperial Irrigation District, Los Angeles Department of Water & Power and Riverside Public Utilities) jointly solicited proposals for up to 29 MW of contract capacity for renewable energy to meet the requirements of SB 859. In January 2018, SMUD entered into a 5-year power purchase agreement with ARP-Loyalton Cogen LLC to fulfill 18 MWs of the required 29 MWs with SMUD’s share being just over 23 percent. The contract became effective on April 1, 2018. On February 18, 2020, ARP-Loyalton Cogen LLC filed for Chapter 11 bankruptcy and stopped producing and selling energy from the biomass plant. On May 7, 2020, the bankruptcy court approved the sale of the Loyalton facility to Sierra Valley Enterprises, LLC (“SVE”). SVE is interested in bringing the facility back into service to produce power again and is currently reviewing the terms of the agreement. If SVE is not willing to accept the terms of the agreement, the POU parties will discuss their options, which may include amending the agreement or issuing a new request for proposals for the remainder of the five-year term.

**Roseburg Forest Products Co.** For the remaining SB 859 biomass obligation of 11 MW, SMUD and the other POUs have entered into a five-year power purchase agreement with Roseburg Forest Products Co. SMUD’s share of the contract capacity is 2.5795 MW, and the plant began operating under the contract on February 26, 2021.

**Sutter Energy Center.** SMUD entered into an initial two-year contract (with a third year exercisable option) with Calpine Energy Services, L.P. (“Calpine”) for the ability to schedule up to 258 MWs of energy from Sutter Energy Center. The Sutter Energy Center is a natural gas-fired, combined-cycle facility located in Yuba City, California. The initial contract became effective on April 1, 2018. SMUD exercised its option to extend the contract and it expired November 1, 2020. SMUD entered into a new contract with Calpine for the same 258 MWs of energy that became effective January 1, 2021, and had an original expiration date of January 1, 2024. In December 2021, SMUD extended the Sutter Energy Center contract. The contract currently expires December 31, 2026.

**Drew Solar, LLC.** In June 2018, SMUD entered into a 30-year power purchase agreement with Drew Solar, LLC for the purchase of energy from a 100 MW solar PV project located in Imperial County, California. The project’s commercial operation date was set to be December 31, 2021. The scheduled commercial operation date is delayed to June 2022 due to Force Majeure claims surrounding the COVID pandemic and supply chain constraints caused by changes in Federal regulatory requirements.

**Wildflower Solar.** In October 2018, SMUD entered into a 25-year power purchase agreement with Wildflower Solar I, LLC, for the purchase of energy, capacity, and RECs from a 13 MW solar PV project located in Rio Linda, California. The project began commercially operating on December 18, 2020.

**Coyote Creek (Formerly Sacramento Valley Energy Center, LLC.)** In July 2021, SMUD entered into a 30-year power purchase agreement with Sacramento Valley Energy Center, LLC for the purchase of
energy from a 200 MW solar PV and 100 MW four-hour Battery Energy Storage System (“BESS”) capacity project located in Sacramento County, California. The project’s commercial operation date was expected to be December 31, 2023. The scheduled commercial operation date has been delayed to April 2024 as a result of a change in Federal environmental permitting requirements.

**SloughHouse Solar, LLC.** In September 2021, SMUD entered into a 30-year power purchase agreement with SloughHouse Solar, LLC for the purchase of energy from a 50 MW solar PV project located in Sacramento County, California. The project’s commercial operation date is expected to be December 31, 2023.

**Country Acres Solar.** In December 2021, SMUD issued a Request for Offers (“RFO”) seeking qualified Power Purchase Agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD’s North Area transmission system. The project site is located on over 1,000 acres in Placer County near the city of Roseville. SMUD received and is currently evaluating RFO responses. SMUD’s early-stage development efforts are underway to support the start of construction mobilization in the first quarter 2023 with an expected commercial operation date in late 2024.

**McClellan Solar.** In December 2021, SMUD issued a RFO seeking qualified power purchase agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD’s distribution electric system by tapping into SMUD’s existing 69 kV distribution line. The project site is located on approximately 170 acres, in McClellan Park in Sacramento County. SMUD received and is currently evaluating RFO responses. SMUD’s early-stage development efforts are underway to support the start of construction mobilization in the third quarter of 2023 with an expected commercial operation date in late 2024.

**Geyser Power Company, LLC.** In March 2021, SMUD executed a 10-year power purchase agreement with Geyser Power Company, LLC for 100 MW of capacity from The Geyser geothermal energy plant located in Lake and Sanoma Counties, California. SMUD will start to receive deliveries on January 1, 2023.

**Transmission Service Agreements**

**TANC California-Oregon Transmission Project.** The 340 mile COTP is one part of a three 500-kV line coordinated system known as the California-Oregon Intertie (“COI”). The COTP is allocated one-third of the 4,800 MW capability of the COI system (see related agreements below). TANC is entitled to use 1,390 MW and is obligated to pay approximately 80% of the operating costs of the COTP. SMUD is a member of TANC and a party to Project Agreement No. 3 (“PA3”), under which it is entitled to 378 MW and obligated to pay on an unconditional take-or-pay basis about 27.5% of TANC’s COTP debt service and operations costs, subject to a “step-up” obligation of up to 25% of its entitlement share upon the unremedied default of another TANC member-participant. In 2009, SMUD entered into a long-term layoff agreement with certain members that increased SMUD’s entitlement by 35 MW. In 2014, SMUD entered into another long-term layoff agreement with certain other members that increased SMUD’s COTP entitlements by 128 MW and amended the 2009 layoff agreement that returned 13 MW to a member. As of December 31, 2018, SMUD was entitled to approximately 528 MW of TANC’s transfer capability for imports and 405 MW for exports, and is obligated to pay approximately 38.6% of TANC’s COTP debt service and operations costs. SMUD’s payments under this contract, like SMUD’s payments under its other power purchase and transmission service agreements, are treated as “Maintenance and Operation Costs” or “Energy Payments” under the resolutions securing the Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below). SMUD relies on its COTP rights to purchase power, access contingency reserves through the Northwest Power Pool, and obtain renewable resources to supplement its own resources to serve its load.
TANC maintains its own property/casualty insurance program. TANC’s budget for COTP costs, support services and advocacy expenses is about $42.2 million for 2022. SMUD’s obligation of the TANC budget is about $16.1 million for 2022.

**TANC Tesla-Midway Transmission Service.** TANC has a long-term contract with PG&E to provide TANC with 300 MW of transmission service between PG&E’s Midway Substation and the electric systems of the TANC Members (the “Tesla-Midway Service”). SMUD’s share of the Tesla-Midway Service had been 46 MW. As part of the 2009 long-term layoff agreement, SMUD acquired an additional 2 MW of South-of Tesla Principles (“SOTP”) transmission rights for 15 years starting February, 2009 from another TANC member, bringing SMUD’s share of the Tesla-Midway Service to 48 MW.

**Bonneville Power Administration.** In 2009, SMUD entered into a transmission service agreement with the Bonneville Power Administration (“BPA”) for 60 MW of firm point-to-point transmission service from BPA’s Hilltop substation in north eastern California to the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project over BPA’s 230kV transmission lines. In early 2013, in accordance with BPA’s transmission tariff, the transmission service was split into two 30 MW services and deferred as appropriate to better fit the timing of expected commercial operation of the Phase 1 30 MW and Phase 2 30 MW of the Patua project. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Patua Project LLC.” SMUD submitted another request for the 30 MW of transmission procured for Patua Phase 2 to split the service into a 10 MW and a 20 MW service, with the 10 MW of service deferred to be timed with the expected commercial operation date of Phase 2. With the termination of Phase 2 and SMUD’s reduced obligation due to the poor performance of Phase 1, much of the transmission reserved for it will no longer be needed. BPA does not have a provision in its transmission tariff for early termination of transmission service. However, the power purchase agreement with Patua requires Patua to cover unused transmission that SMUD has procured for the Patua purchases. On January 1, 2020, SMUD’s transmission rights with BPA were reduced to 19 MW. This now aligns with SMUD’s Pacificorp transmission rights of 19 MW described below.

**Pacificorp.** In 2009, SMUD entered into a transmission service agreement with PacifiCorp for 60 MW of firm point-to-point transmission service across PacifiCorp’s high voltage step-up transformer at the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project. In early 2013, in accordance with PacifiCorp’s transmission tariff, the commencement of the 60 MW of transmission service was deferred to fit the timing of first deliveries expected from the 30 MW of Phase 1 of the Patua project. In 2013, SMUD terminated the 60 MW of transmission service and requested two new transmission services of 30 MW each, the start of which is timed to better fit with the expected start dates of phases 1 and 2 of the Patua Project. With the reduction in expected Patua output due to the Patua power purchase agreement fourth amendment, SMUD terminated the second 30 MW transmission agreement, and replaced it with a 10 MW transmission service agreement for Patua Phase 2. With the recent termination of Phase 2 of the Patua Project, SMUD terminated the 10 MW Pacificorp transmission service agreement. As a result of the reduced obligation to take power from the Patua Project, SMUD has reduced its Pacificorp transmission service from 30 MW to 19 MW.

**Western Area Power Administration.** SMUD does not have a direct interconnection of its power system to the COTP. To receive power deliveries that use its COTP rights, SMUD has a long-term transmission service agreement with WAPA for transmission of 342 MW of power from the COTP line (received at WAPA’s Tracy or Olinda substations) to SMUD’s system. In May of 2011, WAPA completed the Sacramento Voltage Support Transmission Project. Completion of this project has given SMUD an additional 165 MW of transmission service rights on WAPA’s system from the COTP at the Olinda Substation to SMUD’s system at the Elverta Substation.
Projected Resources

The following tables titled “Projected Requirements and Resources to Meet Load Requirements Energy Requirements and Resources” (the “Energy Table”) and “Capacity Requirements and Resources Net Capacity – Megawatts” (the “Capacity Table”) describe SMUD’s contracted commitments and owned resources available to meet its forecasted load requirements through the year 2031. Resources are shown on an annualized basis with market purchases netted against surplus sales to arrive at a single net position for each year. Because SMUD’s available resources do not exactly match its actual load requirements on an hourly basis, there are times during a year when resources available will either exceed or be insufficient to meet SMUD’s needs. Expected actual capacity values are included in the tables. These values may differ from measured net demonstrated capacity values of the Local Area Gas-Fired Plants. The table below also includes the impact energy efficiency has on resource requirements as discussed below under “Demand Side Management Programs.” See “BUSINESS STRATEGY” and “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants.”

Resources listed in both the Energy Table and the Capacity Table are listed as either renewable or non-renewable. Generally, SMUD follows the CEC guidelines for eligibility requirements. Some of SMUD’s renewable resources listed include solar, wind, geothermal, small hydroelectric facilities with a capacity of 30 MW or less, and biomass (representing generation from a fuel comprised of agricultural wastes and residues, landscape and tree trimmings, wood and wood waste).

As in any forecast, assumptions are made. In both the Energy Table and the Capacity Table the WAPA and UARP forecasts assume average water conditions throughout the period. On the capacity table, WAPA and SFA renewable capacity is estimated based on the ratio of renewable energy to total WAPA or SFA energy. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Hydroelectric.”

The Uncommitted Purchases (Sales) on the tables represent either anticipated future needs or surpluses. Future needs are met well in advance of delivery. They also include both renewable and non-renewable resources.

The Transmission Losses represent reductions in the amount of energy or capacity from the location it was purchased to the point of entering SMUD’s electrical system. This amount reduces the Total Resources available to meet the Total Projected Energy Requirements of the electrical system.

Demand Side Management Programs

SMUD’s demand-side management initiatives represent an integral element of its total resource portfolio, and are organized into two major components: energy efficiency and load management programs. Energy efficiency offerings include a wide variety of programs and services to customers to retrofit or upgrade existing equipment and fixtures and to install new energy efficiency measures in existing and new construction facilities. Load management allows SMUD to reduce the load on the electric system by cycling residential air conditioning, and calling upon commercial/industrial customers to curtail energy usage when energy is constrained during the summer or system emergencies. Load management programs are projected to allow SMUD to shed approximately 60 MW of peak load in an emergency on a hot day, representing about 2% of SMUD’s maximum system peak demand.

The customer “smart meter” system with 2-way communication capability provides information regarding customer usage patterns, which is expected to help SMUD tailor rate designs that provide customers with both the information and ability to manage their energy usage around high energy cost periods.
## PROJECTED REQUIREMENTS AND RESOURCES TO MEET LOAD REQUIREMENTS

### ENERGY REQUIREMENTS AND RESOURCES (GWh)

<table>
<thead>
<tr>
<th>Renewable Resources</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District or Joint Powers Authority Owned:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UARP - Small Hydro(3)</td>
<td>70</td>
<td>89</td>
<td>99</td>
<td>96</td>
<td>103</td>
<td>103</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Solano Wind</td>
<td>584</td>
<td>597</td>
<td>777</td>
<td>854</td>
<td>836</td>
<td>836</td>
<td>838</td>
<td>836</td>
<td>836</td>
<td>836</td>
</tr>
<tr>
<td>SFA – Shell Landfill Gas and Digester Gas(2)</td>
<td>146</td>
<td>811</td>
<td>784</td>
<td>767</td>
<td>767</td>
<td>759</td>
<td>761</td>
<td>760</td>
<td>760</td>
<td>760</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>800</td>
<td>1,497</td>
<td>1,660</td>
<td>1,716</td>
<td>1,706</td>
<td>1,698</td>
<td>1,702</td>
<td>1,700</td>
<td>1,701</td>
<td>1,701</td>
</tr>
<tr>
<td><strong>Purchases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western (WAPA) – Small Hydro(3)</td>
<td>10</td>
<td>19</td>
<td>20</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Patua (Gradient/Vulcan) – Geothermal</td>
<td>140</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>147</td>
</tr>
<tr>
<td>Cal Energy – Geothermal</td>
<td>223</td>
<td>223</td>
<td>224</td>
<td>223</td>
<td>223</td>
<td>223</td>
<td>224</td>
<td>223</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td>Iberdrola (PPM) – Wind</td>
<td>95</td>
<td>98</td>
<td>98</td>
<td>45</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Grade – Wind</td>
<td>883</td>
<td>897</td>
<td>900</td>
<td>897</td>
<td>897</td>
<td>897</td>
<td>900</td>
<td>897</td>
<td>897</td>
<td>897</td>
</tr>
<tr>
<td>Recurrent SolarShares</td>
<td>174</td>
<td>171</td>
<td>170</td>
<td>171</td>
<td>171</td>
<td>170</td>
<td>169</td>
<td>168</td>
<td>167</td>
<td>167</td>
</tr>
<tr>
<td>Rancho Seco PV2</td>
<td>311</td>
<td>333</td>
<td>332</td>
<td>330</td>
<td>328</td>
<td>327</td>
<td>325</td>
<td>322</td>
<td>320</td>
<td>320</td>
</tr>
<tr>
<td>Feed-in-Tariff Photovoltaic – Solar</td>
<td>215</td>
<td>210</td>
<td>209</td>
<td>208</td>
<td>207</td>
<td>206</td>
<td>205</td>
<td>204</td>
<td>203</td>
<td>202</td>
</tr>
<tr>
<td>Drew Solar</td>
<td>175</td>
<td>301</td>
<td>301</td>
<td>298</td>
<td>297</td>
<td>295</td>
<td>294</td>
<td>292</td>
<td>291</td>
<td>289</td>
</tr>
<tr>
<td>Sloughhouse Solar</td>
<td>--</td>
<td>0</td>
<td>132</td>
<td>131</td>
<td>130</td>
<td>130</td>
<td>129</td>
<td>128</td>
<td>128</td>
<td>127</td>
</tr>
<tr>
<td>Calpine Geothermal</td>
<td>--</td>
<td>876</td>
<td>878</td>
<td>876</td>
<td>876</td>
<td>876</td>
<td>876</td>
<td>876</td>
<td>876</td>
<td>876</td>
</tr>
<tr>
<td>Wildflower Solar</td>
<td>33</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Planned Solar with Storage</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>761</td>
<td>757</td>
<td>753</td>
<td>749</td>
<td>745</td>
<td>742</td>
<td>738</td>
</tr>
<tr>
<td>Coyote Creek Solar</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>414</td>
<td>522</td>
<td>507</td>
<td>505</td>
<td>502</td>
<td>500</td>
<td>497</td>
</tr>
<tr>
<td>Other Long-Term Contracts</td>
<td>189</td>
<td>180</td>
<td>171</td>
<td>160</td>
<td>52</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Future Variable Renewable Projects</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>756</td>
<td>867</td>
<td>1,687</td>
<td>1,959</td>
<td>2,787</td>
<td>2,787</td>
</tr>
<tr>
<td>Future Firm Renewable Projects</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,451</td>
<td>3,486</td>
<td>4,027</td>
<td>4,819</td>
<td>5,399</td>
<td>5,474</td>
<td>6,385</td>
<td>7,582</td>
<td>8,397</td>
<td>8,385</td>
</tr>
<tr>
<td><strong>Non-Renewable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District or Joint Powers Authority Owned:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UARP – Large Hydro(3)</td>
<td>1,149</td>
<td>1,481</td>
<td>1,599</td>
<td>1,606</td>
<td>1,609</td>
<td>1,609</td>
<td>1,609</td>
<td>1,609</td>
<td>1,609</td>
<td>1,609</td>
</tr>
<tr>
<td>SFA – Cosumnes</td>
<td>3,496</td>
<td>3,246</td>
<td>3,136</td>
<td>3,067</td>
<td>3,082</td>
<td>2,439</td>
<td>1,731</td>
<td>1,165</td>
<td>513</td>
<td>513</td>
</tr>
<tr>
<td>CVFA – Carson Ice</td>
<td>314</td>
<td>357</td>
<td>319</td>
<td>262</td>
<td>9</td>
<td>2</td>
<td>--</td>
<td>--</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>SCA – P&amp;G</td>
<td>726</td>
<td>626</td>
<td>553</td>
<td>524</td>
<td>241</td>
<td>133</td>
<td>40</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SPA – McClellan</td>
<td>16</td>
<td>7</td>
<td>2</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>SPA – Campbell Soup</td>
<td>663</td>
<td>389</td>
<td>362</td>
<td>179</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,363</td>
<td>6,106</td>
<td>5,970</td>
<td>5,639</td>
<td>4,941</td>
<td>4,183</td>
<td>3,380</td>
<td>2,778</td>
<td>2,125</td>
<td>2,125</td>
</tr>
<tr>
<td><strong>Purchases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western (WAPA) – Large Hydro(3)</td>
<td>337</td>
<td>613</td>
<td>641</td>
<td>629</td>
<td>629</td>
<td>629</td>
<td>629</td>
<td>629</td>
<td>629</td>
<td>629</td>
</tr>
<tr>
<td>Western (WAPA) Customers (wheeling)(3)</td>
<td>20</td>
<td>36</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Calpine Sutter</td>
<td>852</td>
<td>1,300</td>
<td>1,141</td>
<td>1,003</td>
<td>82</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,209</td>
<td>1,950</td>
<td>1,820</td>
<td>1,670</td>
<td>749</td>
<td>667</td>
<td>667</td>
<td>667</td>
<td>667</td>
<td>667</td>
</tr>
<tr>
<td><strong>Total Resources</strong></td>
<td>10,823</td>
<td>13,039</td>
<td>13,476</td>
<td>13,844</td>
<td>12,795</td>
<td>12,022</td>
<td>12,134</td>
<td>12,726</td>
<td>12,890</td>
<td>12,878</td>
</tr>
<tr>
<td>Uncommitted Purchases / Sales</td>
<td>(109)</td>
<td>(2,391)</td>
<td>(2,816)</td>
<td>(3,200)</td>
<td>(2,113)</td>
<td>(1,267)</td>
<td>(1,289)</td>
<td>(1,779)</td>
<td>(1,785)</td>
<td>(1,607)</td>
</tr>
<tr>
<td><strong>Total Projected Energy Requirements</strong></td>
<td>10,676</td>
<td>10,612</td>
<td>10,632</td>
<td>10,611</td>
<td>10,651</td>
<td>10,727</td>
<td>10,819</td>
<td>10,922</td>
<td>11,082</td>
<td>11,250</td>
</tr>
<tr>
<td>Energy Efficiency (EE) Board Goals</td>
<td>109</td>
<td>183</td>
<td>254</td>
<td>321</td>
<td>393</td>
<td>448</td>
<td>504</td>
<td>550</td>
<td>581</td>
<td>611</td>
</tr>
<tr>
<td>SB1 Photovoltaic Goals</td>
<td>60</td>
<td>121</td>
<td>168</td>
<td>211</td>
<td>763</td>
<td>819</td>
<td>876</td>
<td>931</td>
<td>985</td>
<td>1,036</td>
</tr>
<tr>
<td>Expected Electric Vehicle (EV) Charging</td>
<td>(17)</td>
<td>(44)</td>
<td>(77)</td>
<td>(121)</td>
<td>(182)</td>
<td>(247)</td>
<td>(324)</td>
<td>(408)</td>
<td>(499)</td>
<td>(600)</td>
</tr>
<tr>
<td>Electric Building (EB)</td>
<td>(9)</td>
<td>(21)</td>
<td>(37)</td>
<td>(58)</td>
<td>(106)</td>
<td>(144)</td>
<td>(190)</td>
<td>(256)</td>
<td>(345)</td>
<td>(437)</td>
</tr>
<tr>
<td>Battery Storage (Utility)</td>
<td>--</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(129)</td>
<td>(137)</td>
<td>(177)</td>
<td>(209)</td>
<td>(262)</td>
<td>(262)</td>
</tr>
<tr>
<td>Battery Storage (BTM)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total Gross Energy Requirements before EE, SB1 and EV Charging</strong></td>
<td>10,819</td>
<td>10,852</td>
<td>10,939</td>
<td>10,962</td>
<td>11,388</td>
<td>11,462</td>
<td>11,501</td>
<td>11,520</td>
<td>11,526</td>
<td>11,577</td>
</tr>
</tbody>
</table>

(1) Totals may not sum due to rounding.

(2) Includes a biomethane contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”).

(3) 2022 based on current precipitation levels as of March 31, 2022. All other years assume average precipitation.
## CAPACITY REQUIREMENTS AND RESOURCES

### NET CAPACITY – MEGAWATTS

<table>
<thead>
<tr>
<th>Load:</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Peak</td>
<td>2,874</td>
<td>2,863</td>
<td>2,853</td>
<td>2,844</td>
<td>2,878</td>
<td>2,882</td>
<td>2,888</td>
<td>2,907</td>
<td>2,929</td>
<td>2,952</td>
</tr>
<tr>
<td>Transmission Losses</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Dispatchable Demand Resource</td>
<td>(71)</td>
<td>(71)</td>
<td>(71)</td>
<td>(71)</td>
<td>(146)</td>
<td>(165)</td>
<td>(183)</td>
<td>(202)</td>
<td>(165)</td>
<td>(165)</td>
</tr>
<tr>
<td><strong>Adjusted Peak</strong></td>
<td>2,831</td>
<td>2,820</td>
<td>2,810</td>
<td>2,801</td>
<td>2,760</td>
<td>2,745</td>
<td>2,733</td>
<td>2,733</td>
<td>2,792</td>
<td>2,815</td>
</tr>
<tr>
<td>15% Reserve Margin</td>
<td>425</td>
<td>423</td>
<td>421</td>
<td>420</td>
<td>414</td>
<td>412</td>
<td>410</td>
<td>410</td>
<td>419</td>
<td>422</td>
</tr>
<tr>
<td><strong>Adjusted Peak with Reserves</strong></td>
<td>3,255</td>
<td>3,244</td>
<td>3,231</td>
<td>3,221</td>
<td>3,174</td>
<td>3,157</td>
<td>3,143</td>
<td>3,143</td>
<td>3,210</td>
<td>3,237</td>
</tr>
</tbody>
</table>

### Renewable Resources

**District or Joint Powers Authority Owned:***

- **UARP – Small Hydro**: 45, 45, 45, 45, 45, 45, 45, 45, 45, 45
- **Solano Wind**: 120, 98, 117, 163, 46, 39, 37, 38, 34, 31
- **SFA – Shell Landfill Gas and Digester Gas**: 29, 114, 114, 114, 120, 120, 120, 120, 120, 120

**Total** | 193 | 256 | 276 | 322 | 211 | 204 | 202 | 202 | 199 | 196

**Purchases:**

- **Western (WAPA) – Small Hydro**: 8, 10, 10, 9, 10, 10, 10, 10, 10, 10
- **Iberdrola (PPM) – Wind**: 32, 15, 7, --, --, --, --, --, --, --
- **Grady – Wind**: 45, 32, 27, 24, 54, 60, 55, 55, 55, 56
- **Pattu (Gradient/Vulcan) – Geothermal**: 12, 12, 12, 12, 12, 12, 12, 12, 12, 12
- **Calfego – Geothermal**: 26, 26, 26, 26, 26, 26, 26, 26, 26, 26
- **Geyser – Geothermal**: 95, 95, 95, 95, 95, 95, 95, 95, 95, 95
- **Recurrent Solar**: 73, 64, 25, 20, 4, 3, 3, 3, 3, 3
- **Coyote Creek Solar**: --, --, 140, 124, 29, 23, 17, 13, 11, 11
- **Sloughhouse Solar**: --, --, 11, 0, 2, 2, 2, 1, 2, 1
- **SFA (Cosumnes)**: 56, 32, 12, 14, 12, 12, 10, 10, 8, 8
- **CVFA (Carson-Ice)**: 103, 103, 103, 103, 103, 100, 100, 100, 100, 100
- **SCA (Procter & Gamble)**: 166, 166, 166, 166, 166, 166, 166, 166, 100, 100
- **SPA (McClellan)**: 72, 72, 72, --, --, --, --, --, --, --
- **SPA (Campbell Soup)**: 170, 170, 170, 170, --, --, --, --, --, --
- **Hedge Battery**: 4, 4, 4, 4, 4, 4, 4, 4, 4, 4

**Total** | 292 | 436 | 617 | 519 | 1,221 | 1,228 | 1,342 | 1,455 | 1,483 | 1,436

### Non-Renewable

**District or Joint Powers Authority Owned:**

- **UARP – Large Hydro**: 640, 640, 640, 640, 640, 640, 640, 640, 640, 640
- **SFA (Cosumnes)**: 542, 456, 456, 456, 456, 456, 456, 456, 456, 456
- **CVFA (Carson-Ice)**: 103, 103, 103, 103, 103, 100, 100, 100, 100, 100
- **SCA (Procter & Gamble)**: 166, 166, 166, 166, 166, 166, 166, 166, 100, 100
- **SPA (McClellan)**: 72, 72, 72, --, --, --, --, --, --, --
- **SPA (Campbell Soup)**: 170, 170, 170, 170, --, --, --, --, --, --
- **Hedge Battery**: 4, 4, 4, 4, 4, 4, 4, 4, 4, 4

**Total** | 1,697 | 1,611 | 1,611 | 1,539 | 1,369 | 1,366 | 1,366 | 1,300 | 1,300 | 1,300

### Purchases:

- **Western (WAPA) – Large Hydro**: 250, 309, 309, 303, 303, 303, 303, 303, 303, 303
- **Western (WAPA) Customers**: 15, 18, 18, 18, 18, 18, 18, 18, 18, 18
- **Sutter Energy Center**: 258, 258, 258, 258, 258, 258, 258, 258, 258, 258
- **Firm Contract Reserves**: 14, 17, 17, 17, 17, 17, 17, 17, 17, 17
- **Committed Purchases**: 450, 250, --, --, --, --, --, --, --, --

**Total** | 986 | 852 | 602 | 596 | 596 | 596 | 596 | 596 | 596 | 596

**Uncommitted Purchases / (Sales)** | 88 | 88 | 126 | 246 | (223) | (237) | (363) | (410) | (367) | (291)

**Total Resources** | 3,255 | 3,244 | 3,231 | 3,221 | 3,174 | 3,157 | 3,143 | 3,143 | 3,210 | 3,237

---

1. Based on information available as of March 31, 2022. Totals may not sum due to rounding. Capacity values for wind, solar, storage, and future variable renewable projects shown are based on resource effective load carrying capability (ELCC) modeling.

2. The SFA Project is a 495 MW plant that includes 100 MW capacity attributable to a biogas contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”) and 395 MW capacity from natural gas.

3. SMUD assumes that for all firm system purchases, the suppliers will be planning 5% reserves.
Balancing Authority Area Agreements

Background. SMUD began operating as an independent control area, later termed a Balancing Authority, on June 18, 2002 within the WECC reliability organization’s region. This reduced SMUD’s exposure to the costs and reliability risks of the CAISO’s markets. SMUD expanded its operational footprint beyond SMUD’s service territory to include WAPA’s electric system, including the MID, Roseville, and Redding service areas (on January 1, 2005) and the COTP (on December 1, 2005). As described further below, SMUD ceased to be the Balancing Authority on April 30, 2011, as BANC took SMUD’s place as the Balancing Authority. SMUD remains the operator of the Balancing Authority through a contract with BANC. SMUD administers the contracts with WAPA and TANC to provide specified Balancing Authority-related and other services, and is compensated by WAPA and TANC for its added labor expense. TANC recovers such Balancing Authority services costs as a part of its annual operating budget from the COTP Participants and WAPA recovers its Balancing Authority services costs through its rates for power and transmission service. The agreement with WAPA, among other terms, establishes operating reserve obligations between the parties. WAPA in turn has agreements with electric systems connected to it to assure that such systems also operate reliably (i.e., MID, Roseville and Redding). As a result of the transition to BANC as the Balancing Authority, SMUD assigned or terminated its interconnection and operations agreements with other interconnecting Balancing Authority areas (i.e., CAISO, BPA and TID). BANC is now the party to these agreements as they primarily address only Balancing Authority matters required for compliance with the reliability standards issued by the North American Electric Reliability Corporation (“NERC”), such as emergency assistance arrangements. See also “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Energy Imbalance Market.”

Reliability Standards. The Energy Policy Act of 2005 gave FERC authority to enforce reliability standards for the bulk electric system. In June 2007, these standards became mandatory for SMUD and BANC.

In late 2019, SMUD and BANC underwent a combined NERC/WECC audit to evaluate compliance with applicable reliability standards. These audits occur every three years. At the conclusion of the audit, regulators determined that neither entity had any compliance violations related to the Operations and Planning or Critical Infrastructure Protection Standards. Resolutions to minor recommendations and areas of concern were completed in 2020. SMUD and BANC will undergo another NERC/WECC audit sometime in 2022.

Balancing Authority of Northern California. SMUD, MID, Redding and Roseville executed a Joint Exercise of Powers Agreement (the “BANC JPA Agreement”) creating BANC on May 8, 2009. BANC became operational on May 1, 2011 as a Balancing Authority and replaced SMUD as the entity responsible for Balancing Authority-related reliability standards. Since that time, the Trinity Public Utilities District and the City of Shasta Lake have also become members of BANC. As provided in the BANC member agreement, liability for penalties associated with such Balancing Authority-related reliability standards are shared on a pro rata basis among the members of BANC. SMUD is the Balancing Authority operator under contract and performs Balancing Authority operational functions on behalf of BANC, much as it did when it was the Balancing Authority. The BANC JPA Agreement assigns cost responsibility based on member load within the BANC Balancing Authority, with SMUD representing approximately 70% of the total load.

Power Pool and Other Agreements

Northwest Power Pool Agreement. The Northwest Power Pool (“NWPP”) is an agreement among over 30 utilities and public agencies in the western United States to coordinate contingency reserve sharing, referred to as the NWPP Reserve Sharing Program (“RSP”). The RSP permits participants to rely on one
another in the event that any participant experiences a generating resource outage. While SMUD became an RSP participant in 2009, participation is limited to Balancing Authorities, which SMUD relinquished to BANC in 2011. Under the RSP, BANC and TID (also a NWPP member) share their reserve amounts and when necessary may call upon NWPP reserves using BANC member systems and unused COTP rights. The NWPP RSP permits members to operate more efficiently by reducing the contingency reserves that they would otherwise need to have available if they could not rely on each other.

**TANC-SMUD OASIS Administration Agreement.** SMUD entered into an agreement with TANC to provide OASIS services (transmission sales and scheduling related services in the BANC BA of TANC members’ COTP rights) on September 29, 2005. SMUD is compensated for performing these services. TANC and SMUD entered into a letter agreement dated October 25, 2010 to clarify each party’s role for regulatory reliability standards compliance responsibilities and take into account SMUD’s increased efforts related to supporting TANC’s compliance requirements. TANC includes the costs of this service in its annual budgets and recovers the costs from its members who use the TANC OASIS to make their COTP transmission available to third parties.

Other Agreements with PG&E

**Background.** SMUD’s electric system was originally purchased from PG&E in 1947. SMUD’s service area is mostly surrounded by PG&E’s service area and the two electric systems are interconnected at SMUD’s Rancho Seco and Lake 230-kV substations.

**Interconnection Agreement.** PG&E and SMUD executed a Replacement Interconnection Agreement (“RIA”) which became effective on January 1, 2010. The RIA provides that SMUD and PG&E operate their interconnections reliably, plan their electric systems to meet their load requirements, and avoid or mitigate impacts they cause by certain electric system modifications. The new agreement has a termination date of December 31, 2024, subject to FERC approval.

**Generator Interconnection Agreements.** SMUD signed a Large Generator Interconnection Agreement with CAISO and PG&E for the Solano 3 Wind Project, effective December 16, 2008, with a 50-year term. The Solano Wind Project Phase 1 has interconnection rights granted through a Small Generator Interconnection Agreement with the CAISO and PG&E and the Solano Wind Project Phase 2 has interconnection rights granted through a Large Generator Interconnection Agreement, also with the CAISO and PG&E. Both agreements became effective in January 2010 and both have terms of 20 years. SMUD entered into a Large Generator Interconnection Agreement with the CAISO and PG&E on June 3, 2021 for the planned 90.8 MW Solano 4 Wind project.

Other generator interconnection agreements include a Small Generator Interconnection Agreement with PG&E for Slab Creek with a 22-year term which became effective on January 14, 2010, and a Small Generator Interconnection Agreement with PG&E for the Chili Bar Project with a 10-year term which became effective on June 2, 2021.
SELECTED OPERATING DATA

Selected operating data of SMUD for the four years ended December 31, 2018 through 2021 are presented in the following table.

SMUD SELECTED OPERATING DATA
CUSTOMERS, SALES, SOURCES OF ENERGY AND REVENUES

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2021</td>
<td>2020</td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Customers at End of Period:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>572,786</td>
<td>568,741</td>
<td>565,103</td>
<td>559,907</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>69,426</td>
<td>68,628</td>
<td>68,203</td>
<td>67,782</td>
</tr>
<tr>
<td>Other</td>
<td>7,345</td>
<td>7,354</td>
<td>7,406</td>
<td>7,448</td>
</tr>
<tr>
<td>Total</td>
<td>649,557</td>
<td>644,723</td>
<td>640,712</td>
<td>635,137</td>
</tr>
<tr>
<td>MWh Sales:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>4,749,079</td>
<td>4,906,566</td>
<td>4,493,548</td>
<td>4,515,031</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>5,649,474</td>
<td>5,453,120</td>
<td>5,616,920</td>
<td>5,661,449</td>
</tr>
<tr>
<td>Other</td>
<td>54,473</td>
<td>55,590</td>
<td>55,770</td>
<td>57,031</td>
</tr>
<tr>
<td>Total</td>
<td>10,453,026</td>
<td>10,415,276</td>
<td>10,166,238</td>
<td>10,233,511</td>
</tr>
<tr>
<td>Surplus power/out of area sales</td>
<td>2,774,907</td>
<td>2,259,991</td>
<td>1,878,205</td>
<td>1,516,289</td>
</tr>
<tr>
<td>Total</td>
<td>13,227,933</td>
<td>12,675,267</td>
<td>12,044,443</td>
<td>11,749,800</td>
</tr>
<tr>
<td>Sources of Energy Sold MWh:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generated by SMUD</td>
<td>6,776,244</td>
<td>6,414,380</td>
<td>7,143,944</td>
<td>7,089,430</td>
</tr>
<tr>
<td>Purchased or exchanged</td>
<td>6,884,003</td>
<td>6,691,279</td>
<td>5,324,217</td>
<td>5,078,432</td>
</tr>
<tr>
<td>Total</td>
<td>13,660,247</td>
<td>13,105,659</td>
<td>12,468,161</td>
<td>12,167,862</td>
</tr>
<tr>
<td>Less System losses and SMUD usage</td>
<td>432,314</td>
<td>430,392</td>
<td>423,718</td>
<td>418,062</td>
</tr>
<tr>
<td>Total</td>
<td>13,227,933</td>
<td>12,675,267</td>
<td>12,044,443</td>
<td>11,749,800</td>
</tr>
<tr>
<td>Gross System peak demand (kW)(1)</td>
<td>3,019,000</td>
<td>3,057,000</td>
<td>2,927,000</td>
<td>2,944,000</td>
</tr>
<tr>
<td>Average kWh sales per residential customer(2)</td>
<td>8,316</td>
<td>8,650</td>
<td>7,987</td>
<td>8,101</td>
</tr>
<tr>
<td>Average Revenue per kWh Sold:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential(2) (cents)</td>
<td>16.20</td>
<td>15.27</td>
<td>14.90</td>
<td>14.43</td>
</tr>
<tr>
<td>Commercial &amp; industrial(2) (cents)</td>
<td>13.95</td>
<td>13.17</td>
<td>12.71</td>
<td>12.57</td>
</tr>
</tbody>
</table>

(1) Peak system MW values are measured at the four SMUD interconnection points and exclude SMUD’s generation losses. Historical values include the impacts of dispatchable, non-dispatchable, and energy efficiency program capacity savings.

(2) The average kWh sales per residential customer and the average revenue per kWh sold are calculated based upon billed and unbilled sales.

Source: SMUD

SELECTED FINANCIAL DATA

SMUD Financial Information

The following table presents selected financial data of SMUD. Under generally accepted accounting principles, data with respect to SMUD’s component units, such as the Authorities, is included with that of SMUD. The following presents data for SMUD only and not its component units, such as the Authorities. SMUD’s audited financial statements for the years ended December 31, 2021, and December 31, 2020, are included in APPENDIX B attached to this Official Statement. The following unaudited data for SMUD (excluding its component units) is drawn from SMUD’s financial records that have been subjected to the auditing procedures applied in the audits of SMUD’s and its component units’ financial statements for the years ended December 31, 2018 through 2021.

A-44
### SMUD FINANCIAL DATA (1)
(Thousands of dollars)

#### Summary of Income

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018 (restated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenues</td>
<td>$1,784,313</td>
<td>$1,582,979</td>
<td>$1,553,167</td>
<td>$1,589,612</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>(1,463,138)</td>
<td>(1,397,845)</td>
<td>(1,412,199)</td>
<td>(1,376,987)</td>
</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>321,175</td>
<td>185,134</td>
<td>140,968</td>
<td>212,625</td>
</tr>
<tr>
<td>Interest and Other Income (Expense)</td>
<td>108,564</td>
<td>63,014</td>
<td>(21,113)</td>
<td>76,966</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>(81,692)</td>
<td>(80,699)</td>
<td>(66,185)</td>
<td>(73,021)</td>
</tr>
<tr>
<td>Change in Net Position</td>
<td>$348,047</td>
<td>$167,449</td>
<td>$ 53,670</td>
<td>$ 216,570</td>
</tr>
</tbody>
</table>

#### Selected Statement of Net Position Information

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Plant in Service</td>
<td>$3,448,439</td>
<td>$3,234,208</td>
<td>$3,187,135</td>
<td>$2,995,505</td>
</tr>
<tr>
<td>Construction Work in Progress</td>
<td>365,478</td>
<td>460,155</td>
<td>351,584</td>
<td>396,794</td>
</tr>
<tr>
<td>Electric Utility Plant – Net</td>
<td>$3,813,917</td>
<td>$3,694,363</td>
<td>$3,538,719</td>
<td>$3,392,299</td>
</tr>
<tr>
<td>Unrestricted Cash</td>
<td>$569,001</td>
<td>$662,155</td>
<td>$451,800</td>
<td>$434,103</td>
</tr>
<tr>
<td>Rate Stabilization Fund</td>
<td>$188,992</td>
<td>$168,726</td>
<td>$143,669</td>
<td>$96,694</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$6,020,991</td>
<td>$5,826,449</td>
<td>$5,429,137</td>
<td>$5,254,839</td>
</tr>
<tr>
<td>Net Position</td>
<td>$2,292,640</td>
<td>$1,944,593</td>
<td>$1,777,145</td>
<td>$1,723,476</td>
</tr>
<tr>
<td>Long-Term Debt</td>
<td>$2,387,686</td>
<td>$2,523,921</td>
<td>$2,166,389</td>
<td>$1,803,840</td>
</tr>
</tbody>
</table>

#### Debt Service Coverage Ratios

<table>
<thead>
<tr>
<th></th>
<th>Parity Debt Service Coverage Ratio</th>
<th>Parity and Subordinate Debt Service Coverage Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.59x</td>
<td>2.47x</td>
</tr>
<tr>
<td></td>
<td>2.25x</td>
<td>2.14x</td>
</tr>
<tr>
<td></td>
<td>2.11x</td>
<td>2.06x</td>
</tr>
<tr>
<td></td>
<td>2.37x</td>
<td>2.37x</td>
</tr>
</tbody>
</table>

(1) The financial statements of SMUD comprise financial information of SMUD along with its component units, CVFA, SPA, SCA, SFA, NCGA and NCEA. This table includes only financial information of SMUD excluding its component units. Net operating revenues and expenses and Electric Utility Plant and Capitalization of CVFA, SPA, SCA, SFA, NCGA and NCEA are not included in this table, although amounts paid to or received from the Authorities by SMUD are included.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund for each full year as follows:

- 2021: $20.3 million
- 2020: $25.1 million
- 2019: $47.0 million
- 2018: ($3.2 million)

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.
Financial Information of SMUD and the Authorities

The following table presents a summary of selected financial information for SMUD and the Authorities.

### SUMMARY OF FINANCIAL INFORMATION OF SMUD AND THE AUTHORITIES FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

(Thousands of dollars)

<table>
<thead>
<tr>
<th>Year Ended December 31, 2021</th>
<th>Year Ended December 31, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMUD</td>
<td>SMUD</td>
</tr>
<tr>
<td>Authorities</td>
<td>Total(1)</td>
</tr>
<tr>
<td>Operating Revenues(2).........</td>
<td>$1,784,313</td>
</tr>
<tr>
<td>Operating Expenses............</td>
<td>(1,463,138)</td>
</tr>
<tr>
<td>Operating Income..............</td>
<td>321,175</td>
</tr>
<tr>
<td>Interest and Other Income</td>
<td>108,564</td>
</tr>
<tr>
<td>Interest Expense.............</td>
<td>(81,692)</td>
</tr>
<tr>
<td>Change in Net Position........</td>
<td>$348,047</td>
</tr>
<tr>
<td>SMUD</td>
<td>** Authorities</td>
</tr>
<tr>
<td>SMUD</td>
<td>** Authorities</td>
</tr>
<tr>
<td>Operating Revenues(2).........</td>
<td>$1,784,313</td>
</tr>
<tr>
<td>Operating Expenses............</td>
<td>(1,463,138)</td>
</tr>
<tr>
<td>Operating Income..............</td>
<td>321,175</td>
</tr>
<tr>
<td>Interest and Other Income</td>
<td>108,564</td>
</tr>
<tr>
<td>Interest Expense.............</td>
<td>(81,692)</td>
</tr>
<tr>
<td>Change in Net Position........</td>
<td>** $339,585</td>
</tr>
</tbody>
</table>

### Selected Statement of Net Position Information

<table>
<thead>
<tr>
<th>Year Ended December 31, 2021</th>
<th>Year Ended December 31, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMUD</td>
<td>SMUD</td>
</tr>
<tr>
<td>Authorities</td>
<td>Total(1)</td>
</tr>
<tr>
<td>Net Plant in Service.........</td>
<td>$3,448,439</td>
</tr>
<tr>
<td>Construction Work in Progress</td>
<td>365,478</td>
</tr>
<tr>
<td>Electric Utility Plant – Net</td>
<td>$3,813,917</td>
</tr>
<tr>
<td>Unrestricted Cash.............</td>
<td>$569,001</td>
</tr>
<tr>
<td>Rate Stabilization Fund......</td>
<td>$188,992</td>
</tr>
<tr>
<td>Total Assets..................</td>
<td>$6,020,991</td>
</tr>
<tr>
<td>Net Position..................</td>
<td>$2,292,640</td>
</tr>
<tr>
<td>Long-Term Debt(3).............</td>
<td>$2,387,686</td>
</tr>
</tbody>
</table>

(1) Financial information for SMUD and the SMUD JPAs (CVFA, SPA, SCA, SFA, NCGA and NCEA) include intercompany balances. The financial information reflects balances after the elimination of intercompany accounts including Authorities distributions to SMUD of $1.4 million in 2021 and $1.6 million in 2020.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund as follows:

- **2021:** $20.3 million
- **2020:** $25.1 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.
Management’s Discussion of SMUD’s Operating Results

**Year Ended December 31, 2021.** For the year ended December 31, 2021, SMUD reported an increase in net position of $348.0 million as compared to an increase of $167.4 million for 2020.

Operating revenues were $201.3 million higher than 2020. This was primarily due to higher sales to customers ($70.1 million), sales of surplus gas ($65.4 million), sales of surplus power ($47.1 million), transfers from the RSF ($18.2 million), AB 32 revenue ($17.9 million) and gain on sale of carbon allowance futures ($3.1 million), partially offset by transfers to the RSF ($13.4 million) and lower public good revenue ($3.5 million).

Operating expenses were $65.3 million higher than 2020. This was primarily due to higher production operating expenses ($89.6 million), purchased power expenses ($71.8 million), and depreciation expenses ($11.9 million), partially offset by lower amortization of pension and OPEB ($84.2 million), public good expenses ($10.7 million), customer accounts expenses ($6.8 million) and transmission and distribution maintenance expenses ($5.5 million).

Non-Operating income increased by $45.5 million primarily due to California Arrearage Payment Program funding ($41.4 million), a settlement related to Rancho Seco damages ($15.0 million), higher investment income ($11.5 million), higher contributions in aid of construction ($4.0 million), offset by dissolution of RBC CSCDA gas prepay contract ($10.9 million), lower insurance proceeds ($8.6 million), lower interest income ($7.3 million), lower unrealized holding gains ($4.0), lower distributions from the JPAs ($2.6 million) and lower legal settlement costs ($2.2 million).

Interest expense increased $1.0 million from 2020.

**Year Ended December 31, 2020.** For the year ended December 31, 2020, SMUD reported an increase in net position of $167.4 million as compared to an increase of $53.7 million for 2019.

Operating revenues were $29.8 million higher than 2019. This was primarily due to higher sales to customers ($42.8 million), transfers from the RSF ($23.1 million), sales of surplus power ($22.3 million), LCFS credit sales revenue ($5.9 million) and other electric revenue ($3.7 million), partially offset by lower sales of surplus gas ($32.7 million), AB 32 revenue ($26.9 million), miscellaneous service revenue ($5.4 million) and customer late fee revenue ($2.3 million).

Operating expenses were $14.4 million lower than 2019. This was primarily due to lower production operating expenses ($42.5 million), administrative and general expenses ($17.4 million), public good expenses ($6.4 million), depletion expense ($4.1 million), production maintenance expenses ($4.1 million) and transmission and distribution maintenance expenses ($3.0 million), partially offset by higher purchased power expenses ($21.4 million), transmission and distribution maintenance expenses ($17.7 million), depreciation expenses ($14.8 million) and amortization of regulatory assets ($8.7 million).

Non-Operating income increased by $84.1 million due to no divestment of its interests in the Rosa Unit ($52.1 million), lower write-off of preliminary projects in 2020 ($11.6 million), dissolution of RBC CSCDA gas prepay contract ($10.9 million), higher insurance proceeds ($8.3 million), higher distributions from the JPAs ($4.0 million) and lower CCA costs net of higher revenues ($2.8 million), partially offset by lower contributions in aid of construction ($2.7 million) and lower unrealized holding gains ($2.4 million).

Interest expense increased $14.5 million from 2019.
**Regulatory Assets.** In accordance with Governmental Accounting Standards Board ("GASB") No. 62, "Regulated Operations," SMUD defers, as regulatory assets, certain types of expenditures. These assets are amortized and collected through future rates.

As of December 31, 2021, SMUD had a total of $703.7 million recorded for regulatory assets. Regulatory assets associated with costs related to implementation of GASB No. 68 which requires SMUD to record a net pension liability was $357.6 million at December 31, 2021. Regulatory assets associated with costs related to implementation of GASB No. 75 which requires SMUD to record a net Other Post Employment Benefit (OPEB) liability was $293.8 million at December 31, 2021. Regulatory assets associated with Rancho Seco decommissioning costs totaled $83.8 million at December 31, 2021. Nuclear fuel storage costs and non-radiological decommissioning costs have been collected in rates since 2009. For a complete description of these regulatory assets, see Note 8 (Regulatory Deferrals) to SMUD’s financial statements.

The Board has authorized the deferral of any charges or credits that result from the change in valuation of ineffective hedges that should be reported as Investment Revenue/Expense on the Statements of Revenues, Expenses and changes in net position. The Board’s resolution establishes that such charges or credits are not included in rates based on market value changes but are included in rates when the underlying transactions occur. Therefore, under GASB No. 62, “Regulated Operations,” any such changes are included in the Statement of Net Position as regulatory assets or liabilities. For a complete description of these derivative financial instruments, see Note 9 (Derivative Financial Instruments) to SMUD’s financial statements.

**RANCHO SECO DECOMMISSIONING**

**Overview.** The 913 MW Rancho Seco Nuclear Power Plant ("Rancho Seco") began Nuclear Regulatory Commission ("NRC") licensed operations in 1974. In June 1989, the electorate of SMUD voted against allowing SMUD to continue to operate Rancho Seco as a nuclear generating facility, and the plant was shut down. In 1991, SMUD submitted a report (the "Financial Assurance Plan") providing required financial assurance to the NRC that SMUD will have sufficient funds available to pay for the cost of decommissioning. On March 17, 1992, the NRC granted SMUD a change from an operating to a possession-only license for Rancho Seco that relieved SMUD from compliance with a number of NRC regulations applicable to operating nuclear power plants. SMUD also filed a proposed decommissioning plan with the NRC (the “Decommissioning Plan”), which was approved in March 1995.

After the decommissioning efforts began, no suitable disposal option was available to SMUD for the Class B and Class C low level radioactive waste generated during the plant decommissioning. With the used nuclear fuel stored onsite requiring oversight staff, SMUD opted to store the Class B and Class C radioactive waste in an existing interim onsite storage building until a suitable disposal option was available. In November 2007, the possession-only license for Rancho Seco was amended to update the Decommissioning Plan to terminate the possession-only license for the Class B and Class C waste in two phases. Phase I of the decommissioning was completed at the end of 2008. Following verification of the site conditions, SMUD submitted a request to the NRC to reduce the licensed facility from 2,480 acres to the interim onsite storage building and about one acre surrounding it. The request was approved by the NRC in September 2009. Phase II of decommissioning included approximately the two-acre interim storage building containing the Class B and Class C radioactive waste and surrounding area. In September 2013, SMUD entered into a contract with the operator of the low-level radioactive waste disposal facility located in Andrews, Texas. Shipment of the Class B and Class C radioactive waste for disposal was completed in November 2014. SMUD conducted additional clean-up activities and radiological surveys, which were followed by NRC confirmatory surveys. The results of these surveys demonstrated unit dose criteria well below NRC release criteria, and the NRC approved the Phase II area for unrestricted use. On
September 21, 2017, SMUD formally requested the termination of the possession-only license. On August 31, 2018, the NRC officially terminated SMUD’s possession-only license for the remaining Class B and Class C waste at Rancho Seco.

As part of the Decommissioning Plan, the nuclear fuel and Greater Than Class C (“GTCC”) radioactive waste is being stored in a dry storage facility (the Independent Spent Fuel Storage Installation or “ISFSI”) constructed by SMUD, adjacent to the former reactor facility. The NRC has separately licensed this facility. The DOE, under the Nuclear Waste Policy Act of 1982, is responsible for permanent disposal of used nuclear fuel and GTCC radioactive waste. SMUD has a contract with the DOE for the removal and disposal of this waste. The DOE was to have a waste repository operating by 1998, but has experienced significant and ongoing delays. The Nuclear Waste Policy Act designates Yucca Mountain in Nevada as the final and exclusive repository for the nation’s used nuclear fuel. The DOE discontinued the Yucca Mountain license review activities in 2010, but after a court ordered the NRC to resume its review in 2013, the NRC published its final safety evaluation report in 2015. The final safety report, and the final environmental impact statement, concluded that the proposed repository would be safe and environmentally sound for one million years.

Nevertheless, seeking alternatives to Yucca Mountain, the Blue Ribbon Commission on America’s Nuclear Future delivered its final report in January 2012 with several recommendations. The Department of Energy (the “DOE”) responded to the recommendations by issuing a report in January 2013 (Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste). Key to both documents is a focus on used fuel from decommissioned sites including Rancho Seco. The DOE report accepts most of the Blue Ribbon Commission recommendations, and contains timelines for fuel management options which proposed removing the fuel from Rancho Seco as early as 2021. However, any progress on the strategies proposed by the DOE is dependent on legislative action by Congress. With no legislative action taken to date, the 2021 projected date for fuel removal slips year-for-year. Therefore, SMUD cannot determine at this time when the DOE will fulfill its contractual obligations to remove the nuclear fuel and GTCC waste from the Rancho Seco facility. In the meantime, SMUD continues to incur costs of approximately $5 to $6 million per year for storage of used nuclear fuel at the ISFSI. SMUD has filed a series of successful lawsuits against the federal government for recovery of past spent fuel costs, with recoveries to date from the DOE in excess of $104 million. SMUD plans to continue pursuing cost recovery claims to ensure it is reimbursed for all such costs in the future. The ISFSI will be decommissioned and its license terminated after the fuel and GTCC is removed.

Financial Assurance Plan. In accordance with the Financial Assurance Plan, SMUD established and funded an external decommissioning trust fund currently held by Wells Fargo Bank (the “Decommissioning Trust Fund”). Pursuant to the Financial Assurance Plan, SMUD made the final deposit into the Decommissioning Trust Fund in 2008. Additional deposits are not expected but will be made if increased cost estimates or reduced fund interest earnings require it. In 2011, the NRC began requiring that SMUD demonstrate financial assurance for decommissioning the ISFSI as well as the former power facility, increasing the overall cost for decommissioning Rancho Seco. The estimated total cost for decommissioning the ISFSI was approximately $5.7 million at December 31, 2019. The decommissioning cost estimate is required to be updated every three years. As of December 31, 2021, the balance of the Decommissioning Trust Fund was $8.87 million, excluding unrealized gains and losses. Based on the current decommissioning cost estimate and the value of the fund, SMUD’s existing Decommissioning Trust Fund provides sufficient funds to complete decommissioning and terminate the ISFSI license.

In addition to these costs, SMUD also estimates that it would cost approximately $13.1 million to restore the site to make it available for other SMUD uses with some major structures remaining intact. Site restoration is not a legal requirement. No site restoration is currently underway.
EMPLOYEE RELATIONS

SMUD has approximately 2,231 employees, most of whom are covered by a civil service system. SMUD is a contracting member of the California Public Employees’ Retirement System (“PERS”). Approximately 50% of SMUD’s work-force is represented as to wages, hours and other terms and conditions of employment, by one of three recognized employee organizations, the International Brotherhood of Electrical Workers (“IBEW”) Local 1245, the Organization of SMUD Employees (“OSE”), and the SMUD Public Safety Officers’ Association (“PSOA”). The remaining 50% of SMUD’s work-force, which includes managers, professional, administrative, supervisory, confidential and security staff, is unrepresented.

SMUD negotiated four-year Memoranda of Understanding (“MOU”) with IBEW and the OSE, effective January 1, 2022, through December 31, 2025. Both contracts contain a no-strike/no-lockout clause effective during the life of the agreements. The PSOA recently obtained recognition status in 2018, and in 2019, SMUD negotiated an MOU with PSOA effective through December 31, 2022. SMUD expects to begin negotiations with PSOA prior to the expiration of the PSOA MOU. SMUD has experienced only one labor interruption, which occurred in January 1980 that lasted four days.

RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS

Pension Plans

SMUD participates in PERS, an agent multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. Benefit provisions and all other requirements are established by State statute and SMUD policies. The pension plan provides retirement benefits, survivor benefits, and death and disability benefits based upon employees’ years of credited service, age, and final compensation.

As of June 30, 2020, the last actuarial valuation date for SMUD’s plan within PERS, the market value of the SMUD plan assets was $1.94 billion. The plan is 79.1% funded on a market value of assets basis, an increase of 0.7% compared to the June 30, 2019 funded status based on the market value of assets.

As an employer, SMUD is required to contribute a percentage of payroll each year to PERS to fund SMUD’s plan based on actuarial valuations performed by PERS. PERS collects the normal cost based on a percentage of payroll and the unfunded liability portion is based on a dollar amount. SMUD also makes partial contributions required of SMUD employees on their behalf and for their account. At the PERS fiscal year ended June 30, 2021, SMUD’s required employer contribution rate for normal cost was 9.1% of payroll and the unfunded liability contribution was $33.5 million. During 2021, SMUD contributed $57.6 million to PERS (including SMUD’s contributions to cover required employee contributions), and SMUD employees paid $15.4 million for their share of the PERS contribution.

For the fiscal years ending June 30, 2022 and June 30, 2023, SMUD is required to contribute 9.0% and 8.9% of payroll for normal costs and $36.3 million and $22.4 million for the unfunded liability contribution, respectively. Assuming no amendments to the plan and no liability gains or losses (which can have a significant impact), PERS has projected that SMUD will be required to contribute 8.7% of payroll to the plan for normal costs and $23.8 million for the unfunded liability contribution for the fiscal year ending June 30, 2024, not including SMUD contributions to cover required employee contributions. The amount SMUD is required to contribute to PERS is expected to increase in the future. The actual amount
of such increases will depend on a variety of factors, including but not limited to investment returns, actuarial methods and assumptions, experience and retirement benefit adjustments.

SMUD has the option to prepay an annual lump sum payment to PERS for the unfunded accrued liability portion only (not including SMUD contributions to cover required employee contributions). SMUD made an annual lump sum prepayment of $31.3 million, and also voluntarily made an additional payment of $175.1 million, for the unfunded accrued liability for the fiscal year ended June 30, 2021. SMUD also made an annual lump sum prepayment of $35.0 million, and voluntarily made an additional payment of $25.0 million for the unfunded accrued liability for the fiscal year ending June 30, 2022.

While SMUD has some ability to adjust the retirement benefits provided to its employees, PERS determines the actuarial methods and assumptions used with respect to assets administered by PERS (including the SMUD plan assets) and makes the investment decisions with respect to such assets. For a description of such actuarial methods and assumptions (including the smoothing conventions used by PERS when setting employer contribution rates) and investments, see the comprehensive annual financial report of PERS (SMUD’s plan is part of the Public Employees’ Retirement Fund of PERS) available on its website at www.calpers.ca.gov. SMUD cannot guarantee the accuracy of such information and neither the comprehensive annual financial report of PERS nor any other information contained on the PERS website is incorporated by reference in or part of this Official Statement. Actuarial assessments are “forward-looking” information that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may prove to be inaccurate or be changed in the future. Actuarial assessments will change with the future experience of the pension plans.

GASB issued statement No. 68 “Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27” (“GASB No. 68”). The primary objective of GASB No. 68 is to improve accounting and financial reporting by state and local governments for pensions. Under GASB No. 68, SMUD is required to report the net pension liability (i.e., the difference between the total pension liability and the pension plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. GASB No. 68 separates financial reporting from funding requirements for pension plans. The net pension asset as of December 31, 2021 is $27.7 million and the net pension liability as of December 31, 2020 is $469.8 million.

SMUD provides its employees with two cash deferred compensation plans: one pursuant to Internal Revenue Code (“IRC”) Section 401(k) (the “401(k) Plan”) and one pursuant to IRC Section 457 (the “457 Plan” and collectively, the “Plans”). The Plans are contributory plans in which SMUD’s employees contribute the funds. Each of SMUD’s eligible full-time or permanent part-time employees may participate in either or both Plans, and amounts contributed by employees are vested immediately. Such funds are held by a trustee in trust for the employees upon retirement from SMUD service and, accordingly, are not subject to the general claims of SMUD’s creditors. SMUD makes annual contributions to the 401(k) Plan on behalf of certain employees pursuant to a memorandum of understanding with both of its collective bargaining units. SMUD matches non-represented employee contributions to the 401(k) Plan up to a set amount. SMUD also makes limited discretionary contributions to non-represented employees hired after January 1, 2013, which contributions fully vest after five years. SMUD made contributions into the 401(k) Plan of $6.1 million in 2021 and $5.8 million in 2020. Prior to 2022, SMUD did not match employee contributions, nor make contributions on behalf of its employees to the 457 Plan. Beginning in 2022, SMUD makes annual contributions to the 457 Plan on behalf of certain employees and matches employee contributions up to a set amount pursuant to a memorandum of understanding with one of its collective bargaining units. Participating employees made contributions into both Plans totaling $30.6 million in 2021 and $28.8 million in 2020.
Other Post-Employment Benefits

SMUD provides post-employment healthcare benefits, in accordance with SMUD policy and negotiated agreements with employee representation groups in a single employer defined benefit plan, to all employees who retire from SMUD, and their dependents. SMUD also provides post-employment healthcare benefits to covered employees who are eligible for disability retirement. SMUD contributes the full cost of coverage for retirees hired before January 1, 1991, and a portion of the cost based on credited years of service for retirees hired after January 1, 1991. SMUD also contributes a portion of the costs of coverage for these retirees’ dependents. Retirees are required to contribute the portion that is not paid by SMUD. The benefits, benefit levels, retiree contributions and employer contributions are governed by SMUD and can be amended by SMUD through its personnel manual and union contracts.

SMUD’s post-employment health care benefits are funded through the PERS California Employers’ Retiree Benefit Trust (“CERBT”), an agent multiple-employer plan. The funding of a plan occurs when the following events take place: the employer makes payments of benefits directly to or on behalf of a retiree or beneficiary; the employer makes premium payments to an insurer; or the employer irrevocably transfers assets to a trust or other third party acting in the role of trustee, where the plan assets are dedicated to the sole purpose of the payments of the plan benefits, and creditors of the government do not have access to those assets.

SMUD has elected to contribute the normal costs to the CERBT but annually receive reimbursement for cash benefit payments from the CERBT. In 2022 and 2021, SMUD decided to forgo making a contribution for the normal costs to the CERBT because there was a net OPEB asset at December 31, 2021 and 2020. In May 2020, SMUD made contributions for the normal costs to the CERBT in the amount of $9.5 million. SMUD can elect to make additional contributions to the trust. During 2021 and 2020, SMUD made healthcare benefit contributions by paying actual medical costs of $24.1 million and $23.8 million, respectively. During 2021 and 2020, SMUD received a $23.3 million and $20.0 million reimbursement for cash benefit payments from the CERBT, respectively.

At June 30, 2021 and 2020, SMUD estimated that the actuarially determined accumulated post-employment benefit obligation was approximately $398.2 and $405.8 million, respectively. At June 30, 2021 and 2020, the plan was 113.1% and 97.9% funded, respectively.

SMUD’s actuary uses PERS economic and other assumptions as the basis for the calculation of the post-employment benefit obligation. The actual accumulated post-employment benefit obligation will vary substantially if such PERS assumptions, such as interest rate and life expectancy, among others, prove to be inaccurate or different than SMUD’s actual experience. Although SMUD believes that such assumptions and estimates are reasonable, no assurance can be given that any such assumptions will prove to be accurate, or that SMUD’s actual accumulated post-employment benefit obligation will not materially exceed its estimates. Additional information is available in Note 15 (Other Postemployment Benefits) and “Required Supplementary Information” to SMUD’s consolidated financial statements.

GASB previously issued SGAS No. 75 “Accounting and Financial Reporting for Postemployment Benefits Other than Pensions”. The primary objective of GASB No. 75 is to improve accounting and financial reporting by state and local governments for post-employment benefits other than pensions (“OPEB”). Under GASB No. 75, SMUD is required to report the net OPEB asset or net OPEB liability (i.e., the difference between the total OPEB liability and the OPEB plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. The net OPEB asset as of December 31, 2021 and December 31, 2020 is $57.5 million and $0.8 million, respectively.
CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS

Estimated Capital Requirements

SMUD has a projected capital requirement of approximately $2.124 billion for the period 2022 through 2026 as shown in the table below. Approximately 60% of this requirement is anticipated to be funded with internally generated funds and cash on hand.

Special projects include costs relating to construction of large substations and the potential construction of Solano Phase 4. The Estimated Capital Requirements table below includes $207 million for Solano Phase 4. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Solano 4 Project.”

ESTIMATED CAPITAL REQUIREMENTS

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Service Area and Other System Improvements Including Distribution System</th>
<th>Improvements to Existing Generation Plant</th>
<th>General Plant</th>
<th>Special Projects</th>
<th>Total Capital Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>$202,367</td>
<td>$77,635</td>
<td>$80,862</td>
<td>$90,393</td>
<td>$451,258</td>
</tr>
<tr>
<td>2023</td>
<td>137,181</td>
<td>50,563</td>
<td>110,371</td>
<td>220,775</td>
<td>518,890</td>
</tr>
<tr>
<td>2024</td>
<td>215,652</td>
<td>46,751</td>
<td>73,569</td>
<td>57,373</td>
<td>393,346</td>
</tr>
<tr>
<td>2025</td>
<td>215,252</td>
<td>46,751</td>
<td>73,569</td>
<td>57,373</td>
<td>392,946</td>
</tr>
<tr>
<td>2026</td>
<td>189,452</td>
<td>46,751</td>
<td>73,569</td>
<td>57,373</td>
<td>367,146</td>
</tr>
</tbody>
</table>

Outstanding Indebtedness

*General.* SMUD typically finances its capital requirements through the sale of revenue bonds, the sale of commercial paper, from draws on its Revolving Credit Facility (as defined below) and from internally generated funds.

SMUD’s Electric Revenue Bonds (the “Senior Bonds”) are issued pursuant to Resolution No. 6649 (the “Senior Resolution”) adopted in 1971, as amended and supplemented (the “Senior Resolution”). As of May 1, 2022, SMUD had Senior Bonds in the aggregate principal amount of $1,966,925,000 outstanding. Immediately following the issuance of the [2022 Series J Bonds] and the refunding of the Refunded Bonds, as described in the forepart of this Official Statement, Senior Bonds in the aggregate principal amount of $[________] will be outstanding under the Senior Resolution. See “PLAN OF FINANCE” in the forepart of this Official Statement. The Senior Bonds are payable solely from the Net Revenues of SMUD’s Electric System. The Senior Bonds are subordinate in right of payment to the prior payment of “Maintenance and Operation Costs” and “Energy Payments” as defined in the Master Resolution, including payments by SMUD to TANC under PA3, payments by SMUD under power purchase agreements related to the Authorities and payments by SMUD to NCGA and NCEA under their respective gas supply contracts.

SMUD’s Subordinated Electric Revenue Bonds (the “Subordinated Bonds”) are issued pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the

* Preliminary, subject to change.
As of May 1, 2022, SMUD had Subordinated Bonds in the aggregate principal amount of $200,000,000 outstanding. The Subordinated Bonds are payable solely from the Net Subordinated Revenues of SMUD’s Electric System. The Subordinated Bonds are subordinate in right of payment to the prior payment of principal of and interest on the Senior Bonds.

SMUD issues commercial paper notes (the “Notes”) from time to time. As of May 1, 2022, no Notes were outstanding. Currently, Notes in the aggregate principal amount of $300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD’s obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February, and August of 2025.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the “Revolving Credit Facility”) in February 2022. As of May 1, 2022, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to $100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD’s payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Bonds (including the [2022 Series J Bonds]) and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

**Joint Powers Authorities.** SMUD has entered into long-term power purchase agreements with SFA relating to the Local Gas-Fired Plants. Under such agreements, SMUD has exclusive control of the dispatch of all five of the Local Gas-Fired Plants and takes all of the power produced by the Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants.” The Authorities are each treated as component units of SMUD for accounting purposes. Only SFA has outstanding debt, which relates solely to the SFA Project and is payable solely from capacity payments made by SMUD under the related power purchase agreement. The SPA bonds were redeemed on July 1, 2015. The CVFA bonds were defeased in September 2019. The SCA bonds were defeased in September 2019. The SFA power purchase agreement relating to the SFA Project is on a take-or-pay basis whereby payments must be made by SMUD regardless of plant performance. As of June 1, 2022, bonds issued by SFA to finance the SFA Project were outstanding in the aggregate principal amount of $101,185,000. SMUD’s payments under the power purchase agreements relating to the Local Gas-Fired Plants are payable from revenues of SMUD’s Electric System prior to the payment of principal of and interest on the Senior Bonds and Subordinated Bonds as either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and Subordinate Resolution.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Gas Authority No. 1 (“NCGA”). NCGA is treated as a component unit of SMUD for accounting purposes. NCGA issued $757,055,000 in bonds in May 2007 for the purpose of paying Morgan Stanley Capital Group in advance for natural gas to be delivered to NCGA and then sold to SMUD pursuant to a long-term purchase contract. SMUD’s obligation under the purchase contract is limited to payment for gas supplies delivered by NCGA. SMUD’s payments under the purchase contract are payable from revenues of SMUD’s Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either “Maintenance and Operation Costs” or “Energy A-54

4139-3939-8711.3
Payments” under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCGA bonds. As of May 1, 2022, related bonds in the aggregate principal amount of $163,485,000 remain outstanding.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Energy Authority (“NCEA”). NCEA is treated as a component unit of SMUD for accounting purposes. NCEA issued $539,615,000 in bonds in December 2018 for the purpose of paying J. Aron & Company LLC in advance for natural gas or electricity to be delivered to NCEA and then sold to SMUD pursuant to a long-term purchase contract. SMUD’s obligation under the purchase contract is limited to payment for gas or electricity supplies delivered by NCEA. SMUD’s payments under the purchase contract are payable from revenues of SMUD’s Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCEA bonds. As of May 1, 2022, related bonds in the aggregate principal amount of $539,615,000 remain outstanding.

[Remainder of Page Intentionally Left Blank]
**Interest Rate Swap Agreements.** SMUD has two interest rate swap agreements relating to previously or currently outstanding Subordinated Bonds and three forward starting interest rate swap agreements relating to potential refunding bonds to be issued in the future, as shown in the following table. For more information, see Note 9 (Derivative Financial Instruments) to SMUD’s consolidated financial statements.

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Termination Date</th>
<th>SMUD Pays</th>
<th>SMUD Receives</th>
<th>Notional Amount (000's)</th>
<th>Counterparty</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/2/1997</td>
<td>7/1/2024</td>
<td>Floating</td>
<td>SIFMA</td>
<td>5.154%</td>
<td>J Aron &amp; Company LLC</td>
</tr>
<tr>
<td>7/15/2003</td>
<td>8/15/2028</td>
<td>Fixed</td>
<td>2.894%</td>
<td>63% of 1M LIBOR</td>
<td>Morgan Stanley Capital Services, Inc.</td>
</tr>
<tr>
<td>07/20/2022</td>
<td>08/15/2033</td>
<td>Fixed</td>
<td>SIFMA</td>
<td>1.607%</td>
<td>Morgan Stanley Capital Services, Inc.</td>
</tr>
<tr>
<td>07/12/2023</td>
<td>08/15/2041</td>
<td>Fixed</td>
<td>0.718%</td>
<td>70% of 1M LIBOR</td>
<td>Barclays Bank</td>
</tr>
<tr>
<td>07/12/2023</td>
<td>08/15/2033</td>
<td>Fixed</td>
<td>0.554%</td>
<td>70% of 1M LIBOR</td>
<td>Barclays Bank</td>
</tr>
</tbody>
</table>

The obligations of SMUD under the swap agreements are not secured by a pledge of revenues of SMUD’s electric system or any other property of SMUD. SMUD does not currently have any collateral posting requirements with respect to the interest rate swap agreements but SMUD may be required to post collateral under certain circumstances. [In connection with the refunding of the Refunded Bonds, as described in the forepart of this Official Statement, SMUD expects to terminate the SIFMA swap with Morgan Stanley Capital Services, Inc. that would otherwise be effective on July 20, 2022. See “PLAN OF FINANCE” in the forepart of this Official Statement.]

**Build America Bonds Subsidy Payments.** SMUD’s Electric Revenue Bonds, 2009 Series V (the “2009 Series V Bonds”) and Electric Revenue Bonds, 2010 Series W (the “2010 Series W Bonds”) were issued as “Build America Bonds” under the provisions of the American Recovery and Reinvestment Act of 2009. At the time the 2009 Series V Bonds and 2010 Series W Bonds were issued, SMUD expected to receive an annual cash subsidy payment from the United States Treasury equal to 35% of the interest payable on the 2009 Series V Bonds and the 2010 Series W Bonds. However, as a result of the federal budget process, many payments from the federal government, including Build America Bonds subsidy payments, have been reduced. Absent the federal budget reductions, the aggregate annual cash subsidy payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds would be approximately $9.8 million. With the current federal budget reductions, SMUD has typically been receiving aggregate annual cash subsidy payments with respect to the 2009 Series V Bonds and the 2010 Series W Bonds of approximately $9.2 million. It is possible that future federal budget actions could further reduce, or eliminate entirely, the annual cash subsidy payments with respect to Build America Bonds, including the annual cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds. SMUD cannot predict the likelihood of the further reduction or elimination of the Build America Bonds subsidy payments. A significant reduction or elimination of the cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds or the 2010 Series W Bonds could be material.
**Debt Service Requirements.** The following table sets forth SMUD’s debt service requirements with respect to SMUD’s Senior Bonds and Subordinated Bonds.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Senior Bonds Debt Service⁽²⁾</th>
<th>Subordinated Bonds Debt Service⁽³⁾</th>
<th>Total Debt Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>$202,767,394</td>
<td>$10,000,000</td>
<td>$212,767,394</td>
</tr>
<tr>
<td>2022</td>
<td>202,721,025</td>
<td>10,000,000</td>
<td>212,721,025</td>
</tr>
<tr>
<td>2023</td>
<td>210,915,894</td>
<td>10,861,111</td>
<td>221,777,005</td>
</tr>
<tr>
<td>2024</td>
<td>179,387,306</td>
<td>7,483,333</td>
<td>186,870,639</td>
</tr>
<tr>
<td>2025</td>
<td>180,108,381</td>
<td>8,833,333</td>
<td>188,941,714</td>
</tr>
<tr>
<td>2026</td>
<td>180,206,231</td>
<td>5,500,000</td>
<td>185,706,231</td>
</tr>
<tr>
<td>2027</td>
<td>180,295,231</td>
<td>6,000,000</td>
<td>186,295,231</td>
</tr>
<tr>
<td>2028</td>
<td>180,403,513</td>
<td>6,000,000</td>
<td>186,403,513</td>
</tr>
<tr>
<td>2029</td>
<td>129,030,387</td>
<td>6,000,000</td>
<td>135,030,387</td>
</tr>
<tr>
<td>2030</td>
<td>139,100,391</td>
<td>6,000,000</td>
<td>145,100,391</td>
</tr>
<tr>
<td>2031</td>
<td>144,711,032</td>
<td>6,000,000</td>
<td>150,711,032</td>
</tr>
<tr>
<td>2032</td>
<td>144,555,595</td>
<td>6,000,000</td>
<td>150,555,595</td>
</tr>
<tr>
<td>2033</td>
<td>144,411,102</td>
<td>6,000,000</td>
<td>150,411,102</td>
</tr>
<tr>
<td>2034</td>
<td>144,261,606</td>
<td>6,000,000</td>
<td>150,261,606</td>
</tr>
<tr>
<td>2035</td>
<td>144,110,773</td>
<td>6,000,000</td>
<td>150,110,773</td>
</tr>
<tr>
<td>2036</td>
<td>143,962,001</td>
<td>6,000,000</td>
<td>149,962,001</td>
</tr>
<tr>
<td>2037</td>
<td>83,681,613</td>
<td>6,000,000</td>
<td>89,681,613</td>
</tr>
<tr>
<td>2038</td>
<td>83,528,863</td>
<td>6,000,000</td>
<td>89,528,863</td>
</tr>
<tr>
<td>2039</td>
<td>80,375,800</td>
<td>6,000,000</td>
<td>86,375,800</td>
</tr>
<tr>
<td>2040</td>
<td>80,382,550</td>
<td>6,000,000</td>
<td>86,382,550</td>
</tr>
<tr>
<td>2041</td>
<td>85,735,800</td>
<td>6,000,000</td>
<td>91,735,800</td>
</tr>
<tr>
<td>2042</td>
<td>31,422,350</td>
<td>28,490,000</td>
<td>59,912,350</td>
</tr>
<tr>
<td>2043</td>
<td>31,214,150</td>
<td>28,490,300</td>
<td>59,704,450</td>
</tr>
<tr>
<td>2044</td>
<td>31,008,750</td>
<td>28,490,350</td>
<td>59,499,100</td>
</tr>
<tr>
<td>2045</td>
<td>30,799,950</td>
<td>28,494,550</td>
<td>59,294,500</td>
</tr>
<tr>
<td>2046</td>
<td>25,391,750</td>
<td>28,492,150</td>
<td>53,883,900</td>
</tr>
<tr>
<td>2047</td>
<td>25,392,000</td>
<td>28,492,700</td>
<td>53,884,700</td>
</tr>
<tr>
<td>2048</td>
<td>25,392,500</td>
<td>28,490,450</td>
<td>53,882,950</td>
</tr>
<tr>
<td>2049</td>
<td>25,390,750</td>
<td>28,489,800</td>
<td>53,880,550</td>
</tr>
<tr>
<td>2050</td>
<td>25,394,250</td>
<td>-</td>
<td>25,394,250</td>
</tr>
<tr>
<td>Total</td>
<td>$3,316,058,938</td>
<td>$370,608,077</td>
<td>$3,686,667,015</td>
</tr>
</tbody>
</table>

(1) Does not include outstanding bonds issued by the Authorities for the Local Gas-Fired Plants. Does not include bonds issued by NCGA, NCEA or SMUD’s portion of bonds issued by TANC. Payments by SMUD which are used by the Authorities, NCGA, NCEA, and TANC to pay debt service on such bonds constitute either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution.

(2) Does not include debt service for the 2022 Series J Bonds or reflect the refunding of the Refunded Bonds. Debt service is not reduced by the amount of any subsidy that SMUD currently expects to receive in connection with the 2009 Series V Bonds and 2010 Series W Bonds.

(3) Based on an assumed interest rate of 3% per annum following (i) the initial scheduled Mandatory Purchase Date of October 17, 2023 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series A and (ii) the initial scheduled Mandatory Purchase Date of October 15, 2025 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series B.

Note: Amounts may not add due to rounding.
INSURANCE

SMUD maintains a comprehensive property/casualty insurance program designed to protect against catastrophic losses that would have an adverse effect on its financial position or operational capabilities. Insurance programs are continuously reviewed and modified when construction, operational exposures, or developments in the insurance industry so warrant. Long term relationships with a variety of insurers minimize SMUD’s susceptibility to the effects of market cycles. SMUD budgets reserves to meet potential insurance deductibles and self-insured liability claims.

SMUD safeguards assets with all-risk property and boiler/machinery insurance with limits of $800 million per occurrence for physical damage and business interruption combined. Various coverage sublimits and deductibles apply to losses arising from certain perils, such as business interruption, earthquake, or flood, respectively. Liability insurance is in effect to defend and indemnify SMUD against third party claims, including general, automobile and sudden and accidental pollution claims with policy limits of $140 million, and wildfire coverage with policy limits of $250 million, all of which include a variety of self-insured retentions.

Nuclear property and liability insurance policies are maintained in accordance with the NRC’s requirements for decommissioned nuclear plants that maintain dry storage of spent fuel on-site. This includes $100 million in first party property damage and decontamination, $100 million for nuclear liability arising from accidents on-site, $200 million for supplier’s and transporter’s nuclear liability, and $300 million for nuclear worker liability. SMUD is exposed to possible retrospective assessments for nuclear property events occurring at other nuclear facilities in the United States capped at ten times SMUD’s annual nuclear property premium (currently the maximum retrospective assessment is approximately $1,000,000).

Other types of insurance include non-owned aircraft liability, workers’ compensation, crime, cyber security, fidelity, fiduciary liability, directors’ and officers’ liability, professional errors and omissions, transportation and installation, and builder’s risk for major facilities under construction.

LEGAL PROCEEDINGS

SMUD is a party to numerous actions arising out of the conduct of its business and affairs, some of which are discussed below. SMUD believes that any losses or adverse financial results it may suffer in these current actions, to the extent not covered by insurance, would not, in the aggregate, have an adverse material impact on SMUD, its business and affairs, the results of its operations, financial position or liquidity.

Environmental Litigation

SMUD was one of many potentially responsible parties that had been named in a number of actions relating to environmental claims and/or complaints. SMUD has resolved these environmental claims and/or complaints and entered into settlement agreements and/or consent orders. These settlement agreements and consent orders have statutory reopener provisions which allow regulatory agencies to seek additional funds for environmental remediation under certain limited circumstances. While SMUD believes it is unlikely that any of the prior settlements or consent orders will be reopened, the possibility exists. If any of the settlements or consent orders were to be reopened, SMUD management does not believe that the outcome will have a material adverse impact on SMUD’s financial position, liquidity or results of operations.
Claim for Accidental Death

In February 2020, SMUD received a claim alleging an employee of a gutter company died after he accidentally came into contact with a SMUD electrical line during an installation. The claim is for approximately $43 million. SMUD concluded the electrical lines at the site of the accident exceeded required clearances and there is no basis for the claim against SMUD. SMUD management believes that SMUD has no potential liability in this matter and that any costs ultimately borne by SMUD will not have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

Proposition 26 Lawsuit

Two SMUD customers jointly filed a complaint against SMUD in October 2019. The complaint states that SMUD violated Proposition 26 (see “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Proposition 26” for a description of Proposition 26) when SMUD’s Board on June 24, 2019 adopted rate increases for 2020 and 2021. The Plaintiffs contend the rate increases do not reflect SMUD’s reasonable cost of service because they include a 9.2% scalar that SMUD applied to its TOD residential rate restructure in the 2017 rate process which SMUD’s Board of Directors adopted at that time. Therefore, the plaintiffs contend SMUD’s 2020 and 2021 rates should be decreased by this scalar amount because the scalar exceeded SMUD’s cost of service, and refunded to SMUD customers. Because SMUD has a strong evidentiary record supporting the Board’s rate decisions in 2017 and 2019, and views the lawsuit as having little merit, SMUD anticipates the court will rule in SMUD’s favor. The plaintiffs have requested to amend the complaint, which has delayed the court’s proceeding until the amended complaint is filed. While SMUD believes the court will rule in its favor, SMUD is unable to predict the outcome of the litigation or, if or to the extent SMUD ultimately is not successful in the litigation, what remedies against SMUD may be available. SMUD management believes that if SMUD is not successful in the litigation, and to the extent the outcome would have a material adverse impact on SMUD’s financial position, liquidity, or results of operations, the Board would make appropriate rate modifications based on an evidentiary record consistent with guidance from a judicial decision in the case.

Other Litigation Matters

Currently, SMUD is party to various claims, legal actions and complaints relating to its operations, including but not limited to: property damage and personal injury, contract disputes, torts, and employment matters. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD’s financial position, liquidity or results of operation.

FERC Administrative Proceedings

SMUD is involved in a number of FERC administrative proceedings related to the operation of wholesale energy markets, regional transmission planning, gas transportation and the development of NERC reliability standards. While these proceedings are complex and numerous, they generally fall into the following categories: (i) filings initiated by the CAISO (or other market participants) to adopt/modify the CAISO Tariff and/or establish market design and behavior rules; (ii) filings initiated by existing transmission owners (i.e., PG&E and the other IOUs) to pass-through costs to their existing wholesale transmission customers; (iii) filings initiated by FERC on market participants to establish market design and behavior rules or to complain about or investigate market behavior by certain market participants; (iv) filings initiated by transmission owners under their transmission owner tariffs for the purpose of establishing a regional transmission planning process; (v) filings initiated by providers of firm gas transportation services under the Natural Gas Act; and (vi) filings initiated by NERC to develop reliability standards applicable to owners, users, and operators of the bulk electric system. In addition, SMUD is an active participant in other FERC administrative proceedings, including those related to reliability and
cybersecurity standards, variable resource integration, and transmission planning and cost allocation. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD’s financial position, liquidity or results of operations.

**CPUC Administrative Proceedings**

In July 2016, the CPUC adopted a final decision on PG&E’s triennial gas transmission and storage (“GT&S”) rate case. The case affects SMUD through several tariff rates SMUD pays to move natural gas along PG&E’s backbone transmission lines. As a result of the 2010 San Bruno pipeline explosion, PG&E has applied for a significant increase in its revenue requirement to pay for enhanced safety measures on its entire gas pipeline system, including the backbone. PG&E proposed to increase the transportation tariff significantly for the period 2015-2017 in order to collect revenues to finance dramatic capital expenditures to implement over 75 remedies to enhance pipeline safety improvements of PG&E’s gas transmission pipeline system. The CPUC authorized an 85% increase in PG&E’s revenue requirement, which included an even larger rate increase for electric generators who use local transmission to supply their power plants. Some of those affected parties advocated for a single transportation rate that would eliminate the cost-based distinction between the high local rate that they would pay and the low backbone transmission rate that SMUD would pay. SMUD opposed those parties. In the final decision, CPUC ruled in SMUD’s favor resulting in a backbone rate that remained essentially unchanged through 2018. While certain parties impacted by the increased local transportation rates sought a rehearing on the final decision and later filed a petition for modification of that decision, the CPUC has not acted on the petition for rehearing and it denied the petition for modification.

PG&E’s 2019 GT&S rate case (the “2019 GT&S Case”) was filed on October 30, 2017, and seeks to significantly increase the backbone transmission rates SMUD pays. Unlike the prior GT&S case described in the preceding paragraph, in the 2019 GT&S Case, PG&E is also seeking to divest itself of some of its primary gas storage assets, as well as upgrade those which will remain in its portfolio. This is largely in response to increased regulations and needed costly modifications imposed by the Division of Oil, Gas, and Geothermal Resources in the wake of the Aliso Canyon gas storage leak that occurred in 2016. PG&E estimated that these regulatory changes would reduce the capacity of its gas storage assets by nearly forty percent. Moreover, changes in PG&E’s resource mix due to State policies favoring carbon-free resources, make this divestiture a key part of its overall resource portfolio strategic plan.

SMUD actively participated in the 2019 GT&S Case and was successful in affirming the application of cost causation principles to prevent excessive and unreasonable costs being shifted to electric generator backbone customers like SMUD, either through proposed changes in PG&E’s natural gas storage strategy or through cost shifts within the electric generator customer class. In August 2020, PG&E hosted a workshop on local transmission study parameters and approaches. Several parties presented studies showing varying levels of cost allocation between core and non-core customers.

PG&E filed its 2023 General Rate Case (“GRC”) in June 2021 which includes its gas transmission and storage revenue requirements. In September 2021, PG&E filed an application for approval of its Gas Cost Allocation and Rate Design Proposals (“CARD”). SMUD will actively participate in PG&E’s GRC and CARD proceedings to ensure that costs are fairly allocated to non-core customers, including electric generator backbone customers. Separately, SMUD continues to participate and monitor a proceeding at the CPUC concerning long-term gas system planning. At this point in these proceedings, SMUD management does not anticipate that the ultimate resolution of such cases will have a material adverse effect on SMUD’s financial position, liquidity, or results of operation.
DEVELOPMENTS IN THE ENERGY MARKETS

Background; Electric Market Deregulation

In 1996, the State partially deregulated its electric energy market. CAISO was established, as well as an independent power exchange, the PX. The PX was originally established to permit power generators to sell power on a competitive spot market basis; however, the PX has ceased all power exchange operations and filed for bankruptcy protection.

During 2000 and 2001, the State and many of the other western states experienced significantly higher and more volatile prices for natural gas and wholesale electricity. In reaction to such conditions, SMUD made significant changes to its business strategy to mitigate the impacts of the more volatile and unpredictable energy markets. While the difficult market conditions have moderated substantially, volatility in energy prices in the State are always a potential risk due to a variety of factors which affect both the supply and demand for electricity in the western United States. These factors include, but are not limited to, the implementation of the CAISO market design changes, insufficient generation resources, the increase in intermittent renewable energy resources, natural gas price volatility, fuel costs and availability, weather, transmission constraints and levels of hydroelectric generation within the region. While SMUD has taken a number of steps to mitigate its exposure to price volatility associated with these factors, this price volatility under extreme conditions may contribute to greater volatility in SMUD’s net revenues from the sale of electric energy and, therefore, could materially adversely affect the financial condition and liquidity of SMUD. For a discussion of SMUD’s current resource planning activities and risk management strategies, see “BUSINESS STRATEGY” above.

Cybersecurity

In 2015, Congress passed the Cybersecurity Information Sharing Act, which facilitated the secure sharing of information about cybersecurity threats between electric utilities and the federal government. SMUD participates in sharing and receiving information about cyber security threats in real time through the Electricity Information Sharing and Analysis Center (“E-ISAC”), the central hub for such data to actively manage risk related to potential cyber intrusion.

SMUD also participates in NERC’s development of mandatory, enforceable cyber security standards to address vulnerabilities in electric utility systems. SMUD also adopts voluntary measures suggested as best practices by the National Institute of Standards and Technology (“NIST”) in its national framework.

Cyber-security continues to be a top priority for SMUD. SMUD’s prudent response to this ever-changing threat requires constant monitoring and frequent updates to implement new regulatory requirements as they are developed. SMUD manages risk related to frequently changing regulatory requirements by participating in the development of standards at NERC and NIST and through active engagement in the cyber security policy dialogue in Congress. The Omnibus Spending Bill for Fiscal Year 2022 signed into law by President Biden on March 15, 2022 included a measure which SMUD and other public power entities opposed as redundant to existing E-ISAC reporting without increasing security, being a requirement that critical infrastructure owners and operators report significant cyber incidents to the Cybersecurity and Infrastructure Security Agency (“CISA”) within 72 hours and ransomware payments within 24 hours. Under the measure, CISA is directed to publish a notice of proposed rulemaking to implement the reporting requirements within 24 months.

Notwithstanding regulatory developments, cyberattacks are becoming more sophisticated and certain cyber incidents, such as surveillance, may remain undetected for an extended period. Critical
infrastructure sectors such as the electric grid may be specific targets of cybersecurity attacks or threats. Attacks or threats directed at critical electric or energy sector operations could damage or cause the shutdown of generation, transmission or distribution assets that are essential to SMUD’s ability to serve its customers, cause operational malfunctions and outages affecting SMUD’s electric system, and result in costly recovery and remediation efforts. The costs of security measures or of remediating breaches could be material.

Federal Legislation and Regulatory Proceedings

Energy Policy Act of 2005. On August 8, 2005, the Energy Policy Act of 2005 (the “EPAct of 2005”) was signed into law. The law includes a number of energy-related provisions, including among other things limited FERC jurisdiction over interstate transmission assets of municipal utilities, cooperatives and federal utilities to order these entities to provide transmission services on rates and terms comparable to those the entities charge and provide to themselves; the grant of authority to FERC to establish and certify an electric reliability organization to develop and enforce reliability standards for users of the bulk power transmission system; and prohibitions of certain market practices including the provision of false information and related expansion of FERC civil and criminal penalty authority. So far, the most visible impact of the EPAct of 2005 on SMUD has been the development of federal reliability standards.

Federal Regulation of Transmission Access. The Energy Policy Act of 1992 (the “Energy Policy Act”) made fundamental changes in the federal regulation of the electric utility industry, particularly in the area of transmission access. The Energy Policy Act provided FERC with the authority to require a transmitting utility to provide transmission services at rates, charges, terms and conditions set by FERC. The purpose of these changes, in part, was to bring about increased competition in the electric utility industry. Under the Energy Policy Act, electric utilities owned by municipalities and other public agencies which own or operate electric power transmission facilities which are used for the sale of electric energy at wholesale are “transmitting utilities” subject to the requirements of the Energy Policy Act.

In April 1996, FERC issued its Order No. 888 to implement the competitive open access to transmission lines authorized by the Energy Policy Act. Order No. 888 requires the provision of open access transmission services on a nondiscriminatory basis by all “jurisdictional utilities” (which, by definition, does not include municipal entities like SMUD) by requiring all such utilities to file OATTs. Order No. 888 also requires “nonjurisdictional utilities” (which, by definition, does include SMUD) that purchase transmission services from a jurisdictional utility under an open access tariff and that owns or controls transmission facilities to provide open access service to the jurisdictional utility under terms that are comparable to the service that the nonjurisdictional utility provides itself. Section 211A of the EPAct of 2005 authorizes, but does not require, FERC to order unregulated transmission utilities to provide transmission services. Specifically, FERC may require an unregulated transmitting utility to provide access to their transmission facilities (1) at rates that are comparable to those that the unregulated transmitting utility charges to itself; and (2) on terms and conditions (not relating to rates) that are comparable to those under which the unregulated transmitting utility provides transmission services to itself that are not unduly discriminatory or preferential.

On February 16, 2007, FERC issued Order 890, which concluded that reform of the pro forma OATT was necessary to reduce the potential for undue discrimination and provide clarity in the obligations of transmission providers and customers. Significantly, in Order 890 FERC stated that it will implement its authority under Section 211A on a case-by-case basis and retain the current reciprocity provisions.

On July 21, 2011, FERC issued Order 1000, which among other things requires public utility (jurisdictional) transmission providers to participate in a regional transmission planning process that produces a regional transmission plan and that incorporates a regional and inter-regional cost allocation.
methodology. Similar to Order 890, FERC states that it will implement its authority under Section 211A on a case-by-case basis. However, in Order 1000, FERC appears to expand upon the current reciprocity provisions. Further, FERC states that it has the authority to allocate costs to beneficiaries of services provided by specific transmission facilities even in the absence of a contractual relationship between the owner of the transmission facilities and the identified beneficiary.

SMUD, individually, and through the Large Public Power Council (“LPPC”), unsuccessfully sought a rehearing of Order 1000 and subsequently appealed Order 1000 to the D.C. Circuit Court of Appeals. On August 15, 2014, the D.C. Circuit Court of Appeals rejected all of the arguments raised on appeal, upholding the entirety of Order 1000. LPPC filed a request for en banc review solely on FERC’s ability to allocate costs in the absence of a contractual relationship. The D.C. Circuit Court of Appeals denied rehearing on October 17, 2014. LPPC did not petition the U.S. Supreme Court for writ of certiorari.

The jurisdictional members of WestConnect filed their proposed regional planning process and cost allocation methodology through a series of compliance filings. FERC accepted binding cost allocation for jurisdictional transmission providers of WestConnect and mandated that non-jurisdictional transmission providers identified as beneficiaries of a project have the ability to not accept the cost allocation. Following FERC’s acceptance of the final WestConnect Order 1000 process on May 14, 2015, SMUD executed the WestConnect Order 1000 transmission planning participation agreement with its membership effective January 1, 2016 for the start of the 2016-2017 planning cycle.

However, in response to FERC’s WestConnect orders on compliance, El Paso Electric Company (“El Paso”), a jurisdictional transmission provider, petitioned to the Court of Appeals for the 5th Circuit. In its appeal, El Paso contends that FERC’s WestConnect orders violate Order 1000’s cost causation principle because WestConnect’s binding cost allocation applies only to the jurisdictional transmission providers and thus forces jurisdictional transmission providers to subsidize projects benefitting non-jurisdictional transmission providers that opt-out of projects. SMUD and the other non-jurisdictional transmission providers agreed on a settlement to resolve the matters on appeal in the 5th Circuit, and filed the settlement with FERC on February 16, 2022. Importantly, the settlement does not affect the ability of non-jurisdictional transmission providers to not accept cost allocation for a project. If approved by FERC, the jurisdictional transmission providers have agreed to dismiss their 5th Circuit appeal. The court has held the case in abeyance during the settlement discussions while the parties develop the settlement documents for the FERC filings. In the meantime, SMUD continues to participate in the WestConnect process.

In addition to regional planning, Order 1000 includes an interregional transmission planning component. WestConnect and the other two regional planning entities in the western interconnection (CAISO and Northern Grid), have developed a common FERC-approved approach to jointly evaluate transmission projects that interconnect two or more regions. While El Paso did not appeal FERC’s orders on WestConnect’s interregional planning, the decision of the Court of Appeals for the 5th Circuit described above does implicate the interregional cost allocation process because it defers to WestConnect’s regional cost allocation methodology.

SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally. However, WestConnect has conducted planning cycles under its Order 1000 planning process and has not identified any project eligible for cost allocation. SMUD will continue to take any action necessary, including withdrawing from a cost allocation determination and engaging in FERC proceedings, to ensure that it is not required to pay for transmission costs in the absence of an agreement or service relationship.

Of note, on July 15, 2021, FERC issued an Advance Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator
Interconnection (the “ANOPR”). The ANOPR asks questions and seeks input on reforms that could impact the Order 1000 planning and cost allocation process. It is still early in the rulemaking proceeding, and FERC has not issued any further proposal. However, SMUD will continue to monitor and be engaged in any developments at FERC that impact the Order 1000 process and its participation in WestConnect.

NERC Reliability Standards. The Energy Policy Act (“EPAct”) of 2005 required the FERC to certify an electric reliability organization (“ERO”) to develop mandatory and enforceable reliability standards, subject to FERC review and approval. On February 3, 2006, FERC issued Order 672, which certified the NERC as the ERO. Many reliability standards have since been approved by FERC, including those aimed at protecting the bulk electric system from physical and cyber threats.

The ERO or the regional entities, such as the WECC, may enforce the reliability standards, subject to FERC oversight or the FERC may independently enforce reliability standards. Potential monetary sanctions include fines of up to $1,307,164 per violation per day. Order 693 provides the ERO and regional entities with the discretion necessary to assess penalties for such violations, while also having discretion to calculate a penalty without collecting the penalty if circumstances warrant. On March 18, 2010, FERC issued a Policy Statement on Penalty Guidelines, which appeared to envision the option of more serious penalties than would be imposed by NERC. NERC and a significant part of the industry challenged that Policy Statement. On September 17, 2010, FERC issued a Revised Policy Statement on Penalty Guidelines, which clarified and tempered some of its prior statements, although the revised guidelines maintained that it was appropriate to use the United States Criminal Sentencing Guidelines Model as an analytical tool for assessing penalties. FERC further clarified that its Revised Policy Statement on Penalty Guidelines would only be applied to investigations conducted by FERC.

Anti-Market Manipulation Rules. EPAct of 2005 gave the FERC the authority to issue rules to prevent market manipulation in jurisdictional wholesale power and gas markets, and in jurisdictional transmission and transportation services. These anti-market manipulation rules apply to non-jurisdictional entities such as SMUD. Further, EPAct of 2005 provided the FERC civil penalty authority, which the Commission has stated that it will exercise carefully by assuring that its market manipulation rules are clear.

Greenhouse Gas Emissions. The United States Environmental Protection Agency (the “EPA”) has taken steps to regulate GHG emissions under existing law. In 2007, the U.S. Supreme Court held that the Clean Air Act (“CAA”) directed EPA to regulate GHG emissions from new motor vehicles if it judged that such emissions contribute to climate change. In 2009, the EPA finalized an “Endangerment Finding” under the CAA, declaring that six identified GHGs – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – cause global warming, and that global warming endangers public health and welfare. Subsequently, EPA promulgated GHG standards for passenger cars and light-duty trucks (the so-called “Tailpipe Rule”).-Although that rulemaking was later withdrawn by a different administration, prompting litigation and re-proposal of the standards that has only recently been finalized, the original promulgation of the Tailpipe Rule required EPA to also address emissions of the same pollutants from other sources, namely, the electric sector.

In 2014, the EPA issued a proposed rule under section 111(d) of the CAA called the Clean Power Plan (the “CPP”) that projected power sector emissions reductions of 30% below 2005 levels by 2030. The proposed CPP would have established a rate-based emissions goal for each state, providing states the responsibility to develop a State Implementation Plan (“SIP”) describing how each will meet the goal assigned by EPA using the “Best System of Emissions Reduction” (“BSER”) established by EPA. The BSER under the CPP featured a suite of emissions reduction measures including fuel switching, emissions trading, and other measures. Significantly for the State and its regulated entities, the proposed CPP included a “state measures” plan that allowed for continued operation of successful state programs that achieve CPP goals. The rule was finalized in October 2015.

A-64

4139-3939-8711.3
In November 2015, 27 states and numerous corporations challenged the CPP in court, alleging that EPA had exceeded its authority under the CAA. The U.S. Supreme Court stayed implementation of the CPP pending disposition of the petitions for review in the D.C. Circuit and any subsequent review by the U.S. Supreme Court. The D.C. Circuit Court of Appeals held oral arguments on the petitioner’s claims, but before the court issued a decision, the 2016 presidential election resulted in a change of administration.

The new administration quickly moved for an abeyance (or stay) of the case for as long as the agency needed to review and withdraw the CPP. The court issued a series of 60-day abeyances and ultimately dismissed the case on September 17, 2019. Meanwhile, in August 2018, the EPA proceeded to withdraw the CPP and proposed a different rule under the same provision of the CAA. The new rule, known as the Affordable Clean Energy (“ACE”) rule, would establish a BSER that only includes measures that can be undertaken at an individual power plant, rather than the broader suite of measures envisioned under the CPP. The ACE rule would also allow states to decide individually, on a case-by-case basis, the standards to be achieved by the best system of emission reductions, as well as exempt certain upgrades of fossil-fuel power plants from the CAA’s New Source Review program, and extend the time to implement SIPs after the ACE rule is finalized. The ACE rule was challenged in court by environmental groups and states alleging that the revised rule inadequately responds to the EPA’s responsibility to protect public health and welfare. SMUD joined in this litigation along with other challengers. The D.C. Circuit vacated the ACE rule on Jan. 19, 2021 and remanded it to EPA for review and revision, just days before a new presidential administration took office. Several states led by West Virginia and coal industry members appealed the decision, and the U.S. Supreme Court is expected to issue its ruling in the case later in 2022. The current administration is expected to issue a new rulemaking pending the U.S. Supreme Court’s ruling.

**Federal Clean Energy Legislation.** SMUD expects the 117th Congress may consider substantial legislation related to clean energy and carbon emissions. SMUD actively participates in dialogues at the federal level regarding legislation that would meaningfully alter SMUD’s existing GHG reduction strategies or impose new requirements for electric generators, including, but not limited to, discussions about a proposed federal clean energy standard.

SMUD is unable to predict with certainty at this time whether legislation will ultimately be considered or enacted, whether any new EPA rulemakings will be undertaken, and what the full impact of the reduction of fossil-based generation over time will have on the operations and finances of SMUD’s electric system or the electric utility industry generally.

**State Legislation and Regulatory Proceedings**

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills provide for reduced GHG emission standards and greater investment in energy efficient and environmentally friendly generation alternatives through more stringent RPS. Additionally, ongoing regulatory proceedings address water flow and quality issues related to the Sacramento – San Joaquin River Delta. The following is a brief summary of these bills and regulatory proceedings.

**Greenhouse Gas Emissions.** On June 1, 2005, the Governor of the State signed Executive Order S-03-05, which emphasized efforts to reduce GHG emissions by establishing statewide GHG reduction targets. The targets are: (i) a reduction to 2000 emissions levels by 2010; (ii) a reduction to 1990 levels by 2020; and (iii) a reduction to 80% below 1990 levels by 2050. The Executive Order also called for the California Environmental Protection Agency (“Cal/EPA”) to lead a multi-agency effort to examine the impacts of climate change on the State and develop strategies and mitigation plans to achieve the targets. On April 25, 2006, the Governor of the State signed Executive Order S-06-06 which directs the State to increase production of biofuels in the State and to meet 20% of its renewable energy goals in 2010 and 2020 using biomass resources.
On September 27, 2006, the Governor of the State signed into law AB 32, the Global Warming Solutions Act of 2006 (“AB 32”). AB 32 requires the California Air Resources Board (“CARB”) to adopt enforceable GHG emission limits and emission reduction measures in order to reduce GHG emissions to 1990 levels by 2020. In addition, AB 32 establishes a mandatory reporting program for all IOUs, local, publicly-owned electric utilities and other load-serving entities (electric utilities providing energy to end-use customers) (“LSEs”). The AB 32 reporting program allows CARB to adopt regulations using market-based compliance mechanisms such as a “cap-and-trade” system.

On December 16, 2010, CARB approved a resolution adopting cap-and-trade regulations for the State. The regulations became effective on January 1, 2012. As adopted, the cap-and-trade program covers sources accounting for 85% of the State’s GHG emissions, the largest program of its type in the United States.

The cap-and-trade program has been implemented in phases. The first phase of the program (through December 31, 2014) introduced a hard emissions cap on the combined electric utility and large industrial sectors, covering all sources emitting more than 25,000 metric tons of carbon dioxide-equivalent greenhouse gases (“CO2e”) per year. In 2015, the program was expanded to cover distributors of transportation, natural gas, and other fossil fuels. The cap declined about 2 percent in 2014, and declined 3 percent annually from 2015 to 2020. The cap-and-trade program requires covered entities to retire compliance instruments (allowances and carbon offsets) for each metric ton of CO2e they emit. Initially, CARB allocated free allowances to LSEs and most industrial facilities at roughly 90% of their average emissions. SMUD was granted a higher amount because of early action taken to reduce GHG emissions. In the case of electric utilities, the value of allowances must be used to benefit ratepayers and achieve GHG emission reductions. As the program matures, some covered entities will be required to buy an increasing portion of their allowances at auction or on the secondary market. The cap-and-trade program will also allow covered entities to use offset credits for compliance purposes (not exceeding 8% of a regulated entity’s compliance obligation). Offsets must be obtained from certified projects in sectors that are not regulated under the cap-and-trade program.

In November of 2012, CARB conducted its first allowance auction and auctions now occur on a quarterly schedule. On January 1, 2014, CARB linked the State cap and trade program with a companion program in the Canadian province of Quebec. The first quarterly joint auction for the linked programs occurred in November, 2014. On January 1, 2018, CARB linked the State’s cap-and-trade program with Ontario’s companion program. Immediately thereafter, an entity in any one of the three jurisdictions was able to purchase allowances on the secondary market in a linked jurisdiction, and as of February 21, 2018 (the date of the first joint auction) could purchase allowances in the joint auction. In June 2018, elections in Ontario changed political parties and the new administration formally withdrew from the Cap and Trade linkage. CARB has limited purchase and use of Ontario allowances in response. The August 2018 Cap and Trade auction did not include Ontario. The Washington state legislature recently passed a Cap and Trade bill, which will interact with the State’s markets. Future potential near-term links to the CARB cap-and-trade program also include the states of Oregon and New Mexico.

On October 7, 2015, the Governor of the State signed SB 350 that contained aggressive goals for reducing carbon emissions by 2030, including raising the proportion of renewable energy to 50%, reducing the use of petroleum fuel in cars and trucks by up to 50%, and doubling the energy efficiency of existing buildings. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Renewable Energy and Climate Change” for additional information. In addition, SB 350 established requirements for larger POUs to adopt (by January 1, 2019) and file with the CEC Integrated Resource Plans (“IRPs”) by April 2019 that would show planned procurement to achieve the 50% RPS and State GHG goals established by CARB. The CEC developed “guidelines” for these IRPs for POUs in 2017 and updated them in 2018. CARB established specific GHG target ranges for these IRPs in summer 2018, with SMUD’s planning
target set at 1.1 – 1.9 million metric tons of emissions. SMUD developed and adopted an IRP in 2018 through a comprehensive public process and filed the adopted IRP with the CEC on April 29, 2019. SMUD’s adopted IRP plans for a greater than 60% net reduction in GHG emissions by 2030 relative to 1990 levels, which equals approximately 1.3 million metric tons of GHG emissions. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Renewable Energy and Climate Change.”

On April 29, 2015, the Governor of the State signed Executive Order B-30-15, establishing a goal for the State to reduce GHG emissions to 40% below 1990 levels by 2030. In 2016, the State Legislature passed Senate Bill 32 (“SB 32”), which codified Governor Brown’s goal of reducing the State’s GHG emissions to 40% below 1990 levels by 2030. In 2017, the State Supreme Court resolved a final lawsuit, ruling that the Cap and Trade program was not a “fee” or “tax”, and hence a two-thirds legislative vote for AB 32 was not required. In 2017, the State Legislature passed Assembly Bill 398 (“AB 398”), explicitly authorizing the continuation of the cap and trade program, with designated changes, through 2030. Subsequently, CARB adopted an initial set of regulatory changes extending the Cap and Trade program, including establishing utility sector allowance allocations through 2030. In 2018, CARB completed a rulemaking to implement the cap and trade program changes designated by AB 398. These changes include development of a hard price ceiling for the cap and trade program and two price-containment points below that ceiling, in an attempt to ensure stable prices in the program. CARB adopted final regulations on December 13, 2018.

In addition, any new projects constructed in the State, including power plants, that may cause a significant adverse impact on the environment must be analyzed under CEQA. Some State agencies have begun using CEQA in novel ways to require mitigation of “significant” GHG emissions caused, either directly or indirectly, by a project. Pursuant to Senate Bill 97 passed in 2007, CARB will assist the Governor’s Office of Planning and Research in setting thresholds of significance under CEQA of GHG impacts from new projects. This is an area of State law that is evolving and untested in the courts. However, there is a risk that any project proponent of an electric system infrastructure project might have to mitigate such potential impacts to a level of less than significance.

On December 3, 2012, the Superior Court issued a ruling in Cleveland National Forest Foundation v. San Diego Association of Governments (“SANDAG”), Case No. 2100-00101593, that sided with the State Attorney General and the other petitioners stating that the SANDAG did not follow CEQA when it adopted a $257 billion regional transportation plan in 2011. The ruling expressly invalidated the certification of the Environmental Impact Report (“EIR”) on the grounds that the EIR should have analyzed the plan’s consistency with the governor’s policy goal to reduce GHG emissions by 80% by 2050 as articulated in the 2005 Executive Order S-03-05. On November 24, 2014, the Fourth Appellate District upheld the trial court in a published decision, and SANDAG appealed to the State Supreme Court. On July 13, 2017, the Supreme Court reversed and held that SANDAG’s decision not to adopt the 2050 goal was not an abuse of discretion. Nevertheless, the Court articulated three clear principles for agencies to follow in their CEQA review of planning documents: 1) agencies must take seriously the significance of even small increases in GHG emissions; 2) they must consider science-based State policy guidance in their decision-making; and 3) they are required to use the best scientific information available to determine whether their planning decisions are consistent with the State’s goals. These principles will apply to SMUD in CEQA reviews of future projects.

On September 29, 2006, the Governor of the State signed into law Senate Bill 1368 (“SB 1368”), the GHG Emissions Performance Standard (“EPS”). SB 1368 limits long-term investments in baseload generation by the State’s utilities to power plants that meet an EPS jointly established by the CEC and the CPUC. The agencies have set the EPS at 1,100 pounds CO2 per MWh, which is roughly half of the CO2 emissions rate of a conventional coal-fired power plant. CEC regulations to implement the law for POUs were approved by the Office of Administrative Law on October 16, 2007.
SMUD’s primary supply and demand-side resource needs to meet customers’ electricity usage patterns over the next 10 years are for peaking resources. Currently there is a ban in the State that prohibits the development of nuclear power plants until there is a permanent storage solution for spent fuel rods. With the effective ban on new coal power imports under SB 1368, natural gas-fired, combined cycle power plants would appear to be the primary viable option for fossil fuel based baseload power plant development absent the implementation of new technologies in connection with other resource options. The reliance on a single fuel source will continue to put pressure on the natural gas market in the United States. SMUD has in place a natural gas procurement plan to mitigate natural gas volatility, see “POWER SUPPLY AND TRANSMISSION – Fuel Supply” above.

**Energy Efficiency.** Senate Bill 1037 ("SB 1037"), signed by Governor Schwarzenegger on September 29, 2005, requires that each municipal electric utility, including SMUD, prior to procuring new energy generation resources, first acquire all available energy efficiency, demand reduction and renewable resources that are cost effective, reliable and feasible. SB 1037 also requires each municipal electric utility to report annually to its customers and to the CEC its investment in energy efficiency and demand reduction programs. Further, State Assembly Bill 2021 ("AB 2021"), signed by the Governor on September 29, 2006 requires that the publicly owned utilities establish energy efficiency and demand reduction targets and report and explain the basis of the targets beginning June 1, 2007 and every three years thereafter for a ten year horizon. Future reporting requirements as set forth in AB 2021 include: (i) the identification of sources of funding for the investment in energy efficiency and demand reduction programs, (ii) the methodologies and input assumptions used to determine cost effectiveness, and (iii) the results of an independent evaluation to measure and verify energy efficiency savings and demand reduction program impacts. The information obtained from local publicly owned utilities will be used by the CEC to present the progress made by the publicly owned utilities on the State’s goal of reducing electrical consumption by 10% in ten years and amelioration with the GHG targets presented in Executive Order S-3-05 enacted by the Governor of the State on June 1, 2005.

In response to SB 1037 and AB 2021, SMUD established a specific goal of reducing energy consumption by 15% by 2018 and adopted annual targets for gigawatt hour and megawatt savings. SMUD revisits its energy efficiency goals and programs on a regular basis to ensure compliance with State policies established by SB 1037 and AB 2021 (as modified by SB 350).

SB 350 (passed in 2015) requires the CEC to develop statewide energy efficiency targets for 2030 aimed at doubling the achieved savings, and requires POUs to establish efficiency targets that are “consistent” with those targets. In 2017, the CEC developed a report on the doubling of energy efficiency targets required by SB 350. Both SB 350 and the CEC report contemplate the use of fuel substitution to meet energy efficiency targets and have a strong focus on carbon reduction. In response, SMUD developed a methodology and carbon tool to count fuel substitution, namely switching natural gas end-uses to efficient electric end uses and measuring savings in carbon emissions. SMUD presented its methodology to the joint state agency working group known as the Fuel Substitution Working Group several times in 2019 and adopted a carbon-based metric in early 2020 to guide overall SMUD carbon targets. This goal is expected to facilitate substantial expansion of building electrification and result in more than double the overall amount of energy efficiency being delivered per year, when measured on a carbon reduction basis. The vast majority of this energy efficiency (more than 85%) is expected to be delivered through efficient electrification by 2030.

Also passed in 2015 was AB 802. This bill directed the CEC to develop a State-wide building energy use benchmarking and public disclosure program for those buildings greater than 50,000 square feet. As set forth in regulations adopted by the CEC, building owners are required to report building characteristic information and energy use data each year. The reporting began in 2018 for buildings without
residential utility accounts and in 2019 for buildings with 17 or more residential utility accounts. Energy
utilities must provide building-level energy use data to building owners upon request.

In order to support the implementation of SB 350 and AB 802, the CEC opened a rulemaking to
amend its Title 20 Data Collection regulations, resulting in an expansion of customer data utilities must
report to the CEC. The CEC adopted regulations pursuant to the rulemaking in February 2018, and the
regulations were approved and went into effect in the Summer of 2018. SMUD has made several data
filings under the new regulations. In 2020, the CEC opened a second phase of Data Collection rulemaking
to amend regulations necessary to develop the policy reports and analysis as required by statute to assist
in the CEC’s energy forecasting and assessment activities. The OAL approved the codifying of the
regulations from that proceeding on December 30, 2021.

**Governor’s Zero Emission Vehicle Executive Orders**

Executive Order B-48-18, enacted January 2018, ordered all state entities to work with the private
sector and all appropriate levels of government to put at least 5 million zero-emission vehicles on California
roads by 2030, as well as 250,000 zero-emission vehicle chargers by 2025.

Executive Order N-79020 states the goal of 100 percent of in-state sales of new passenger cars and
trucks will be zero-emission by 2035 and 100 percent of medium- and heavy-duty vehicles in the State be
zero-emission by 2045 for all operations feasible.

Increases in zero-emission vehicle adoption and deployment will result in increased customer usage
of electricity.

**Rooftop Solar Mandate.** In February, 2018, the CEC approved updates to the 2019 Title 24, Part
6, Building Energy Efficiency Standards to require installation of rooftop photovoltaic solar systems for
residential buildings under three stories constructed starting in 2020, with an option to satisfy the
requirement through community solar systems or energy storage. There is a “Community Solar” option for
compliance with the mandate that permits a utility to provide solar power to the residential customers
instead of rooftop solar, and SMUD submitted an application to the CEC for that option. The CEC approved
SMUD’s Community Solar program, Neighborhood SolarShares, on February 20, 2020. In 2021, the CEC
revised the Community Solar option in the 2022 Building Energy Efficiency Standards to include an “opt-
out” provision, which will impact the design and implementation of SMUD’s Neighborhood SolarShares
program. SMUD is updating our Neighborhood SolarShares program to incorporate the 2022 revisions,
which take effect in January 2023. See also “BUSINESS STRATEGY – Serving SMUD’s Customers –
Renewable Options.”

**Renewables Portfolio Standard.** Senate Bill 100 was passed by the Legislature and approved by
Governor Brown on September 10, 2018. The bill sets a 50% RPS target for 2026 and sets compliance
period targets at 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030.
The bill also created a statewide planning goal to meet all of the state’s retail electricity supply with a mix
of RPS-eligible and zero-carbon resources by December 31, 2045. Along with SB 100, Governor Brown
signed a new Executive Order that directs the State to achieve carbon neutrality by 2045 and net negative
greenhouse gas emissions thereafter. The new goal of carbon neutrality by 2045 would be in addition to
existing statewide targets of reducing greenhouse gas emission. By expanding the State’s carbon reduction
goal, the State will also look to reduce carbon through sequestration in forests, soils and other natural
landscapes.

**Advanced Clean Fleets Rule.** In September 2020, Governor Newsom signed Executive Order
N-79-20 to accelerate actions to mitigate and adapt to climate change, and to more quickly move toward a
low-carbon, sustainable and resilient future. Executive Order (EO) N-79-20 set a goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035; and 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. In 2021, CARB released the proposed draft regulation for the Advanced Clean Fleets (the “ACF Rule”). The ACF Rule is part of a comprehensive strategy to achieve the mandates outlined in EO N-79-20 and includes requirements to achieve zero-emission truck and bus fleets significantly earlier for market segments such as public fleets, like SMUD. The ACF Rule introduces zero-emissions vehicle purchasing requirements starting in 2024 that will apply when SMUD adds vehicles to its fleet. This regulation is currently in the pre-rulemaking phase and is scheduled for adoption by the CARB Board in the fall of 2022.

**Load Management Standards.** Sections 25213, 25218(e) and 25403.5 of the Public Resources Code mandate and authorize the CEC to adopt rules and regulations to reduce the uneconomic and unnecessary consumption of energy and to manage energy loads, or demand, to help maintain electrical grid reliability. The original Load Management Standards (“LMS”) regulations were adopted in 1979 and required the implementation of marginal cost pricing industrial time-of-use rates, and residential load control programs. In 2020, the CEC proposed to update the LMS regulations to require the five largest electric utilities in California (including SMUD) to develop retail electricity rates that change at least hourly to reflect locational marginal costs and submit those rates to the utility’s governing body for approval. The LMS is currently in the formal rulemaking phase, with the 45-Day Language released in December 2021. The LMS proposes the following: a) voluntary hourly or sub-hourly rates for each customer class or b) a cost-effective program, to be implemented by the utilities by January 2026. The LMS was tentatively scheduled to be presented to the CEC for approval in May 2022, but the LMS presentation to the CEC was postponed and a new date has not been set. The effective date of the LMS regulation is expected to be January 2023, although this could be subject to change.

**Energy Storage Systems.** In September 2010, the State Legislature enacted, and the Governor signed into law, Assembly Bill 2514 (“AB 2514”). On or before March 1, 2012, the governing board of each POU was required to initiate a process to determine appropriate targets, if any, for the utility to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2020. The bill required each POU to report certain information to the CEC. In 2014, SMUD set a 0 MW target for 2017, and in 2017 set a 9 MW target for 2020. In 2018, SMUD identified a potential need for 246 MW of storage by 2030. Following SMUD’s 2020 compliance report to the CEC in January 2021, going forward SMUD will evaluate and report energy storage planning as part of its IRP update every five years. The next update will be in 2023. See also “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Energy Storage Systems.”

**Sacramento-San Joaquin River Bay-Delta Processes.** The Sacramento-San Joaquin River Delta is an expansive inland estuary, formed at the western edge of the California Central Valley by the confluence of the Sacramento and San Joaquin rivers (“Delta”). There are two substantial Delta planning processes with the potential to affect (1) energy available for SMUD’s purchase from the Central Valley Project (“CVP”) and (2) flows within the Upper American River watershed. These processes are called the Bay-Delta Water Quality Control Plan (“Bay-Delta Plan”) and the Delta Conveyance Project.

The Bay-Delta Water Quality Control Plan is updated periodically by the State Water Resources Control Board (“SWRCB”), the last time being in 2006. The current Bay-Delta Plan update process is being implemented in four phases. The first phase considered southern Delta water quality, with a significant focus on San Joaquin River tributaries. Phase 2, which is initially being addressed by a document under development by SWRCB staff, will address Sacramento River tributaries and various flow related issues, including the critically important one of those tributaries’ contribution to Delta outflow. Phase 3 will concern changes to water rights needed to implement Phase 2. A substantial change in Delta
outflow requirements could have a major impact on the timing of hydroelectric energy generation by the CVP. SMUD has a long-term agreement with WAPA to purchase some of this power (see “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Western Area Power Administration”). On July 18, 2018, the SWRCB released an updated Framework document signaling its staff’s intent to propose Delta outflow requirements of 45–65% unimpaired flows for the Sacramento River tributaries (which includes the American River, the upper portions of which are where the UARP sits), though the report will analyze requirements of 35–75%. If these criteria were implemented, they could cut CVP generation by 50 to 63%. Governor Newsom has urged the SWRCB, other agencies and affected parties to execute voluntary agreements to address species’ needs and outflow requirements. Although the negotiations stalled during the last year of the Trump Administration the interested parties are expected to pursue them more vigorously since President Biden assumed office, though there is as yet no certainty that all affected parties will agree on terms. If the agreements do not come to fruition, SMUD plans to fully participate in all regulatory and legal proceedings to argue for consideration and minimization of impacts to hydropower generation. SMUD will assess the potential impacts of proposed modifications to the present outflow objectives on SMUD’s operations once the SWRCB makes those available.

On January 15, 2020, the State Department of Water Resources (“DWR”) announced it will prepare an Environmental Impact Report (“EIR”) to evaluate the potential impacts of carrying out the Delta Conveyance Project. The Project is expected to entail construction of two intakes on the Sacramento River that will carry water to a main tunnel to the California Aqueduct for delivery south of the Delta. The Project may pose the potential to exacerbate impacts to already imperiled aquatic species, and in turn could have indirectly prompted regulatory agencies to require third parties, such as SMUD, to compensate by making changes to their operations. SMUD will be actively involved in reviewing the draft EIR, the schedule for which has not been released, and any regulatory proceedings to ensure any impacts to SMUD interests are minimized.

**Proposition 26.** Proposition 26 was approved by the electorate on November 2, 2010 and amends Article XIII A and Article XIII C of the State Constitution. Proposition 26 imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State, unless the fees and charges are expressly excluded. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes, unless the fees and charges are expressly excluded. The initiative, according to its supporters, is intended to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, and other measures through the use of non-tax fees and charges. Proposition 26 expressly excludes from its scope a charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the local government of providing the service or product. Proposition 26 is not retroactive as applied to local governments. Although SMUD believes that the initiative was not intended to apply to fees for utility services such as those charged by SMUD and its fees and charges meet the criteria of the exclusion described above, it is possible that Proposition 26 could be interpreted to further limit fees and charges for electric utility services and/or require stricter standards for the allocation of costs among customer classes. SMUD is unable to predict at this time how Proposition 26 will be interpreted by the courts or what its ultimate impact will be. As of the date of this Official Statement, SMUD is unaware of any fees or charges relating to SMUD’s service that would have to be reduced or eliminated because of Proposition 26.

**Wildfire Legislation.** In September 2016, Governor Brown signed into law Senate Bill 1028 (“SB 1028”), which requires POUs (including SMUD), IOUs, and electrical cooperatives to construct, maintain and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by electrical lines and equipment. SB 1028 also requires the governing board of POU’s to make an initial determination whether any portion of that geographical area has a significant risk of
catastrophic wildfire resulting from those electrical lines and equipment, based on historical fire data and local conditions, and in consultation with the fire departments or other entities responsible for control of wildfires within the geographical area.

Senate Bill 901 (“SB 901”), signed into law in September 2018 by Governor Brown, further addresses response, mitigation and prevention of wildfires. The bill requires POUs, including SMUD, before January 1, 2020, and annually thereafter, to prepare a wildfire mitigation plan and present it in a public meeting to their governing board. SB 901 requires POU’s to accept comments on the wildfire mitigation plan from the public, other local and State agencies, and interested parties, and to verify that the plan complies with all applicable rules, regulations, and standards, as appropriate. The bill requires a qualified independent evaluator to review and assess the comprehensiveness of its wildfire mitigation plan and present its report to the board in a public meeting.

In 2019, Governor Newsom released his comprehensive strategy on wildfires, laying the groundwork for legislative discussions on utility wildfire liability and allocating costs associated with catastrophic wildfires, among other things. While the Governor supported a modification of State’s current inverse condemnation doctrine, under which utilities are held liable for wildfire damage without regard to the fault of the utility, no bill was introduced. AB 1054 (Holden) did pass in 2019 that included several provisions for solvent investor owned utilities, including the development of a fund to help pay victim claims for utility ignited wildfires. The bill also created a new Wildfire Safety Division within the CPUC to prioritize wildfire safety throughout the State, and established an appointed Wildfire Safety Advisory Board to advise and make recommendations relating to wildfire safety to this new Division. For POUs, the bill requires submittal of annual wildfire mitigation plans to the Advisory Board for review and advisory opinions.

Senate Bill 247 (“SB 247”), signed by Governor Newsom on October 2, 2019, establishes notification, audit and reporting guidelines for electrical corporations relating to vegetation management requirements in the wildfire mitigation plan. SB 247 also specifies the qualifications for electrical line clearance tree trimmers performing work to comply with the vegetation management requirements in an electrical corporation’s wildfire mitigation plan and requires that qualified line clearance tree trimmers be paid no less than a specified prevailing wage rate. POUs are not required to adhere to SB 247, but the market impacts are projected to significantly increase SMUD’s annual vegetation management costs.

**Nonstock Security.** SMUD sponsored legislation in 2019, Assembly Bill 689, which was signed into law by Governor Newsom on September 5, 2019. This bill expressly allows SMUD the ability to operate a pilot project, of up to three acquisitions, to hold nonstock security in a corporation or other private entity if acquired as part of a procurement of goods or services from that entity, provided that no separate funding is expended solely for the nonstock security. This will allow SMUD to realize the financial benefits of its investments, partnerships, and intellectual property.

**Future Regulation**

The electric industry is subject to continuing legislative and administrative reform. States and Federal entities routinely consider changes to the way in which they regulate the electric industry. Recently, both further deregulation and forms of additional regulation have been proposed for the industry, which has been highly regulated throughout its history. SMUD is unable to predict at this time the impact any such proposals will have on the operations and finances of SMUD or the electric utility industry generally.
OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

CAISO Market Initiatives

The CAISO has initiated a number of initiatives and stakeholder processes that propose certain operational and market changes. SMUD has mitigated the impact of certain CAISO initiatives by taking actions aimed at remaining independent from the CAISO market. Consequently, SMUD participates in the CAISO market for only a small percentage of energy needs (2-3%), and the remaining CAISO usage is discretionary (including EIM, described below). SMUD will continue to monitor the various initiatives proposed by the CAISO and participate in its stakeholder processes to ensure that its interests are protected.

Resource Adequacy Filing

In September 2005, the State Legislature enacted and the Governor signed into law Assembly Bill 380 (“AB 380”), which requires the CPUC to establish resource adequacy requirements for all LSEs within the CPUC’s jurisdiction. In addition, AB 380 requires publicly owned utilities, including SMUD, to meet the most recent resource adequacy standard as adopted by the WECC. In October 2005, the CPUC issued a decision stating that LSEs under its jurisdiction would be required, by June 2006, to demonstrate that they have acquired capacity sufficient to serve their forecast retail customer load plus a 15-17% planning reserve margin. In March 2021, the CPUC issued a decision requiring the three largest investor owned utilities (PG&E, Southern California Edison, and San Diego Gas & Electric) to target a minimum of 2.5% of incremental resources for their planning reserve margin for 2021 and 2022. Subsequently, in December 2021, the CPUC issued another decision that increased the investor-owned utilities’ minimum target by an additional 2.5-5% of incremental resources for 2022 (which creates an effective planning reserve margin of 20-22%) and extended this target to 2023. The WECC has yet to formally adopt a resource adequacy requirement. However, consistent with current WECC practices, SMUD utilizes a 15% planning reserve margin when assessing the need for future resources.

Energy Imbalance Market

Federal and state policymakers have long-promoted the development of organized markets in the west as a means (among other reasons) to better integrate intermittent renewable resources into the electric system, the first of which markets is the Western EIM, operated by the CAISO. The CAISO successfully launched the EIM, a real time only imbalance market, on October 1, 2014, with PacifiCorp as the first participant. Since this time, the EIM has grown significantly with the additions of NV Energy in 2015, Arizona Public Service and Puget Sound Energy in 2016, Portland General Electric in 2017, Idaho Power and Powerex in 2018, BANC (Phase 1) in 2019, the Salt River Project and Seattle City Light in 2020, BANC (Phase 2), the Turlock Irrigation District, the Los Angeles Department of Water and Power, NorthWestern Energy, and the Public Service Company of New Mexico in 2021, and Avista and Tacoma Power in early 2022. Additionally, the EIM footprint will continue to expand further in 2022 and 2023 with the additions of Tucson Electric Power and the Bonneville Power Administration later in 2022 and WAPA Desert Southwest Region and El Paso Electric in 2023. The EIM will number 22 participating Balancing Authority Areas by Spring of 2023.

To date, participation in the EIM by SMUD has shown significant financial and operational benefits, in addition to furthering an already favorable working partnership between SMUD and the CAISO to develop solutions to integrate renewable resources in support of carbon reduction goals.

BANC’s participation not only signaled the first public power participant in the EIM, but it was also implemented utilizing a unique phased approach, with SMUD (as the largest member of BANC) implementing in Phase 1 in 2019, while the other BANC members and WAPA (the “Phase 2 Parties”)
would join after evaluation and approvals in 2021. Upon completion of the EIM Phase 2 “gap assessment” (done to determine what was incrementally required for other BANC members and WAPA to participate in the EIM along with SMUD), it was decided to proceed. The BANC Commission therefore approved BANC to move forward with BANC EIM Phase 2 implementation, and the other BANC members and WAPA began EIM participation under Phase 2 on March 25, 2021.

All of the BANC EIM Phase 2 participants independently obtained approvals from their own governing bodies and executed an agreement with BANC to participate in Phase 2. Part of their Phase 2 participation included reimbursement to SMUD for their respective shares of the upfront infrastructure costs incurred by SMUD in Phase 1 to establish BANC as an EIM Entity. This reimbursement to SMUD by the Phase 2 Parties has been completed.

The CAISO and EIM participants, including SMUD and BANC, have participated in a study and stakeholder process to examine the benefits and develop a design framework to extend the successful EIM real time framework to the CAISO’s day ahead market, referred to as the “extended day ahead market” or “EDAM.” Like EIM, EDAM would broaden the access to regional resources for the reliable integration of renewable resources, only over a longer (day ahead) time horizon. This longer timeframe will allow for a more economic and efficient optimization of regional resources by providing grid operators greater time (day ahead as opposed to real time) to commit or decommit units based on market price signals. Only participants in the EIM will be allowed to extend their participation to EDAM. The CAISO launched a public stakeholder initiative in February of 2020, but due to significant power supply disruptions which occurred in August 2020, the EDAM initiative was put on hold. The process, however, was restarted during the Summer of 2021 and the CAISO and stakeholders are developing a proposal. Should the stakeholder process produce a final EDAM framework and tariff and attract participants, it could be in place by 2024. SMUD will likely need to consider its participation, should an EDAM develop, sometime in 2023.

Community Choice Aggregation

State Assembly Bill 117 (2002) created Community Choice Aggregation by authorizing Community Choice Aggregators (“CCAs”) to aggregate customer electric load and purchase electricity for customers. CCAs can only be formed in IOU territory, and the IOU still transmits and delivers the power to customers, as well as provides metering, billing and customer service. A customer within the CCA territory is automatically “opted in” to the CCA program unless the customer takes affirmative action to receive electric service from the IOU. Various counties and cities in the State have formed CCAs, and many more are in the process of formation. The primary purposes of CCAs are local decision making and to provide greener electricity options for their respective community.

Valley Clean Energy Alliance (“VCE”) is a CCA formed in 2016 by the County of Yolo, the City of Davis, and City of Woodland. The City of Winters joined VCE in 2021. SMUD has for 70 years performed many of the same services required by CCAs and CCAs’ public power and clean energy objectives are in alignment with SMUD’s track record in these areas. SMUD has contracted with VCE as a service provider to support VCE’s data management, call center, power procurement, and technical energy service needs. The initial term of the contract is 5 years beginning May 2018.

SMUD has also contracted with East Bay Community Energy (“EBCE”) to provide call center and data management services for an initial term of three years beginning January 2018. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to implement a local CCA program. The cities of Pleasanton, Newark, and Tracy joined ECBE in 2021. SMUD and EBCE executed a contract extension through December 31, 2024.
Additionally, in June 2019, SMUD contracted with Silicon Valley Clean Energy (“SVCE”) for an initial term of two years, and the parties extended the contract until the end of 2022. Under this contract, SMUD provides program services that will help local SVCE communities reduce carbon pollution while delivering engaging customer experiences through promoting energy efficiency and grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

SMUD management does not expect its current arrangements with VCE, EBCE, and SVCE to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

SMUD will assess the CCA market as it expands and determine whether new opportunities to assist other CCAs provide SMUD a net financial benefit.

See also “BUSINESS STRATEGY – Leveraging Core Competencies – Community Choice Aggregation.”

PG&E Bankruptcy

On January 14, 2019, PG&E and its parent company, PG&E Corporation, announced their intention to file, on or about January 29, 2019, for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (the “Bankruptcy Code”) mainly as a result of wildfire liability claims and exposure. On January 29, 2019, PG&E and PG&E Corporation filed for bankruptcy protection under Chapter 11 of the Bankruptcy Code (the “Bankruptcy Code”). On May 28, 2020, the CPUC approved PG&E’s Plan of Reorganization. On June 20, 2020 the United States Bankruptcy Court for the Northern District of California confirmed PG&E’s Plan of Reorganization. SMUD does not anticipate any material impacts to SMUD in connection with PG&E’s Plan of Reorganization.

In addition, other electric utilities, including the other major IOUs in the State, Southern California Edison and San Diego Gas & Electric Company, have experienced credit rating downgrades as a result of potential wildfire liabilities exposure, which may have implications for the electric market generally.

Other Factors

The electric utility industry in general has been, or in the future may be, affected by a number of other factors which could impact the financial condition and competitiveness of many electric utilities and the level of utilization of generating and transmission facilities. In addition to the factors discussed above, such factors include, among others, (a) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements other than those described above; (b) changes resulting from conservation and demand side management programs on the timing and use of electric energy; (c) changes resulting from a national energy policy; (d) effects of competition from other electric utilities (including increased competition resulting from mergers, acquisitions, and “strategic alliances” of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low cost electricity; (e) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many IOUs; (f) increased competition from independent power producers and marketers, brokers and federal power marketing agencies; (g) “self-generation” or “distributed generation” (such as solar, microturbines and fuel cells) by industrial and commercial customers and others; (h) issues relating to the ability to issue tax exempt obligations, including severe restrictions on the ability to sell to nongovernmental entities electricity from generation projects and transmission service from
transmission line projects financed with tax exempt obligations; (i) effects of inflation on the operating and maintenance costs of an electric utility and its facilities; (j) changes from projected future load requirements; (k) increases in costs and uncertain availability of capital; (l) issues relating to supply chains and the uncertain availability or increased costs of necessary materials; (m) shifts in the availability and relative costs of different fuels (including the cost of natural gas); (n) sudden and dramatic increases in the price of energy purchased on the open market that may occur in times of high peak demand in an area of the country experiencing such high peak demand, such as has occurred in the State; (o) issues relating to risk management procedures and practices with respect to, among other things, the purchase and sale of natural gas, energy and transmission capacity; (p) other legislative changes, voter initiatives, referenda and statewide propositions; (q) effects of changes in the economy; (r) effects of possible manipulation of the electric markets; (s) natural disasters or other physical calamities, including, but not limited to, earthquakes, droughts, severe weather, wildfires and floods; (t) changes to the climate, including increasing volatility in rainfall in the Western United States and a reduction in the depth and duration of the Sierra snowpack; (u) issues relating to cyber-security; and (v) outbreaks of infectious diseases or the occurrence of pandemics. Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility, including SMUD’s electric utility, and likely will affect individual utilities in different ways.

SMUD is unable to predict what impact such factors will have on the business operations and financial condition of SMUD’s electric system, but the impact could be significant. SMUD has taken major steps to mitigate the impacts of many of the changes. This Official Statement includes a brief discussion of certain of these factors. This discussion does not purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the [2022 Series J Bonds] should obtain and review such information.
APPENDIX B

2020 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS AND REPORT OF INDEPENDENT ACCOUNTANTS
APPENDIX C

BOOK-ENTRY SYSTEM

The information in this Appendix regarding DTC has been provided by DTC, and SMUD takes no responsibility for the accuracy or completeness thereof. SMUD cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute the Beneficial Owners either (a) payments of interest or principal with respect to the 2022 Series J Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the 2022 Series J Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement.

The Depository Trust Company (“DTC”) New York, NY, will act as securities depository for the 2022 Series J Bonds. The 2022 Series J Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for each maturity of the 2022 Series J Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world’s largest depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues and money market instruments from over 100 countries that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTCC has a Standard & Poor’s rating of AA+. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2022 Series J Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2022 Series J Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2022 Series J Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2022 Series J Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their beneficial ownership interests in the 2022 Series J Bonds, except in the event that use of the book-entry system for the 2022 Series J Bonds is discontinued.
To facilitate subsequent transfers, all 2022 Series J Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of the 2022 Series J Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2022 Series J Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such 2022 Series J Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2022 Series J Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2022 Series J Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond documents. For example, Beneficial Owners of the 2022 Series J Bonds may wish to ascertain that the nominee holding the 2022 Series J Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of a maturity of the 2022 Series J Bonds is being redeemed, DTC’s practice is to determine by lot the amount of the interest of each Direct Participant in the 2022 Series J Bonds of such maturity to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2022 Series J Bonds unless authorized by a Direct Participant in accordance with DTC’s MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to SMUD as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.’s consenting or voting rights to those Direct Participants to whose accounts the 2022 Series J Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, redemption proceeds and interest payments on the 2022 Series J Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC’s practice is to credit Direct Participants’ accounts, upon DTC’s receipt of funds and corresponding detail information from SMUD or the Trustee, on a payment date in accordance with their respective holdings shown on DTC’s records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in “street name,” and will be the responsibility of such Participants and not of DTC, its nominee, the Trustee or SMUD, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, redemption proceeds and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee. Disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of the Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the 2022 Series J Bonds at any time by giving reasonable notice to SMUD or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

SMUD may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Bond certificates for such 2022 Series J Bonds will be printed and delivered to DTC.
Neither SMUD or the Trustee will have any responsibility or obligation to Participants, to Indirect Participants or to any Beneficial Owner with respect to (i) the accuracy of any records maintained by DTC, any Participant, or any Indirect Participant; (ii) the payment by DTC or any Participant or Indirect Participant of any amount with respect to the principal of or premium, if any, or interest on the 2022 Series J Bonds; (iii) any notice which is permitted or required to be given to Holders under the Resolution; (iv) the selection by DTC, any Participant or any Indirect Participant of any person to receive payment in the event of a partial redemption of 2022 Series J Bonds; (v) any consent given or other action taken by DTC as Bondholder; or (vi) any other procedures or obligations of DTC, Participants or Indirect Participants under the book-entry system.
APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION

The following is a summary of certain provisions of the Resolution. Other provisions of the Resolution are described under the captions “THE 2022 SERIES J BONDS” and “SECURITY FOR THE BONDS.” This summary is not to be considered a full statement of the terms of the Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Resolution.

Between July 1997 and August 2003, SMUD received consents to amend the Resolution from the owners of the requisite percentage of Outstanding Bonds. Pursuant to the authority granted by such consents, SMUD amended the Resolution in October 2003 by adopting the Forty-Eighth Supplemental Resolution and the Forty-Ninth Supplemental Resolution. The following summary of the Resolution reflects such amendments.

The purchasers of the 2022 Series J Bonds, by virtue of their purchase of the 2022 Series J Bonds, will consent to certain amendments to the Resolution (the “Proposed Amendments”). Such amendments are described in bold italic font in the forepart of this Official Statement under “SECURITY FOR THE BONDS – Rates and Charges” and “—Limitations on Additional Obligations Payable from Revenues” and in this summary of the Resolution under the captions “Certain Definitions” and “Reserve Fund for Certain Bonds.” The written consents to the Proposed Amendments of the holders and registered owners of at least 60% of the Bonds outstanding have been filed with SMUD or the Trustee, as required by the Resolution. However, while certain Bonds remain outstanding SMUD must also obtain the written consents of certain bond insurers to implement the Proposed Amendments. SMUD expects to implement the Proposed Amendments when the written consents of such bond insurers are obtained or when the Bonds insured by such bond insurers are no longer outstanding. The final maturity date of the insured Bonds is July 1, 2024.

Certain Definitions

“Assumed Interest Payments” means for any fiscal year or period interest which would accrue during such fiscal year or period on an amount equal to the then unamortized balance of the remaining sum of Assumed Principal Payments at the Assumed Interest Rate.

“Assumed Interest Rate” for any Parity Bond means an interest rate equal to the “Bond Buyer Revenue Bond Index” most recently published in The Bond Buyer prior to the date of issuance of the Parity Bond to which the Assumed Interest Rate is applicable.

“Assumed Principal Payments” means for any fiscal year or period the sum of all amortized portions of each Excluded Principal Payment which fall within such fiscal year or period after the Excluded Principal Payments have been amortized (for purposes of this definition) equally over the years (pro rata in the case of a partial year) in the period commencing on the date of issuance of the Parity Bonds to which such Excluded Principal Payment relates and ending on the date which is 30 years from such date of issuance. Notwithstanding the foregoing, if Parity Bonds determined by SMUD to be an Excluded Principal Payment are refinanced with Parity Bonds determined by SMUD to be another Excluded Principal Payment, (1) Assumed Principal Payments with respect to the refinancing Parity Bonds shall not include any amount of principal which has previously been assumed amortized with respect to the refinanced Parity Bonds and (2) the period over which the refinancing Parity Bonds shall be assumed to be amortized shall be the period commencing on the date of issuance of the refinancing Parity Bonds and ending on the date which is 30 years from the date of issuance of the refinanced Parity Bonds.
“Electric System” means the entire electric system of SMUD, together with all additions, betterments, extensions and improvements.

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Excluded Principal Payments” means each payment of principal on Parity Bonds which the Board of Directors of SMUD determines (on a date not later than the date of issuance of such Parity Bonds) that SMUD intends to refinance at or prior to the maturity date(s) of such Parity Bonds or otherwise to pay with moneys which are not Revenues. No such determination shall affect the security for such Parity Bonds or the obligation of SMUD to pay such payments from Revenues.

“Financial Products Agreement” means an interest rate swap, cap, collar, option, floor, forward or other hedging agreement, arrangement or security, however denominated, entered into by SMUD with a Qualified Provider not for investment purposes but with respect to specific Parity Bonds for the purpose of (1) reducing or otherwise managing SMUD’s risk of interest rate changes or (2) effectively converting SMUD’s interest rate exposure, in whole or in part, from a fixed rate exposure to a variable rate exposure, or from a variable rate exposure to a fixed rate exposure.

“Financial Product Payments” means payments periodically required to be paid to a counterparty by SMUD pursuant to a Financial Products Agreement.

“Financial Product Receipts” means amounts periodically required to be paid to SMUD by a counterparty pursuant to a Financial Products Agreement.

“Maintenance and Operation Costs” means all actual maintenance and operation costs incurred by SMUD (including purchased power and fuel costs) or charges therefor made in conformity with generally accepted accounting principles, exclusive in all cases of depreciation, or obsolescence charges or reserves therefor, amortization of intangibles or other entries of a similar nature, interest charges and charges for the payment of principal of SMUD debt.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Resolution.

“Parity Bonds” includes the Bonds and all revenue bonds issued on a parity with the Bonds as provided or permitted in the Resolution. No Parity Bonds (other than the Bonds) are currently outstanding.

“Qualified Provider” means any financial institution or insurance company which is a party to a Financial Products Agreement if the unsecured long-term debt obligations of such financial institution or insurance company (or of the parent or a subsidiary of such financial institution or insurance company if such parent or subsidiary unconditionally guarantees the performance of such financial institution or insurance company under such Financial Products Agreement and the Trustee receives an opinion of counsel to the effect that such guarantee is a valid and binding agreement of such parent or subsidiary), or
obligations secured or supported by a letter of credit, contract, guarantee, agreement, insurance policy or surety bond issued by such financial institution or insurance company (or such guarantor parent or subsidiary), are rated in one of the two highest rating categories of a national rating agency (without regard to any gradation or such rating category) at the time of the execution and delivery of the Financial Products Agreement.

“Rate Stabilization Fund” means the fund by that name established in the Resolution. From time to time, after provision for debt service, SMUD may deposit in the Rate Stabilization Fund from remaining Revenues such amounts as SMUD shall determine, provided that deposits may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings on deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. Notwithstanding the foregoing, no deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in an engineer’s certificate submitted in connection with the issuance of additional revenue bonds payable from Revenues and withdrawal of the Revenues to be deposited in the Rate Stabilization Fund from the Revenues employed in rendering said engineer’s certificate would have caused noncompliance with the provisions of the Resolution restricting issuance of additional obligations or securities payable from Revenues or to the extent any withdrawal of amounts from remaining Revenues for the Rate Stabilization Fund for any fiscal year would have reduced the debt service ratio referred to in this Appendix under the caption “Reserve Fund for Certain Bonds” to or below 1.40.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from the operation of the Electric System, or arising from the Electric System (consisting primarily of income derived from the sale or use of electric energy generated, transmitted or distributed by facilities of the Electric System, but also including receipts from the sale of property pertaining to the Electric System or incidental to the operation of the Electric System or from services performed by SMUD in connection with the Electric System and revenues derived from certain wholesale, but not retail, sales of water), but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

“Subsidy” means any subsidy, reimbursement or other payment from the federal government of the United States of America under the American Recovery and Reinvestment Act of 2009 (or any similar legislation or regulation of the federal government of the United States of America or any other governmental entity or any extension of any of such legislation or regulation).

Reserve Fund for Certain Bonds

The Electric Revenue Bond Reserve Fund (the “Reserve Fund”) is created under the Resolution. The Reserve Fund secures all Bonds issued prior to January 1, 2004 that are currently outstanding (and not otherwise deemed to be paid and discharged under the Resolution) and may secure additional Bonds issued in the future. However, the Reserve Fund does not secure and will not be available to pay debt service on the 2022 Series J Bonds.

After the close of each fiscal year, SMUD shall determine the ratio (herein called the “debt service ratio”) of (1) the Net Revenues during said fiscal year to (2) the maximum annual debt service during the period of three fiscal years next following said fiscal year on all Bonds and Parity Bonds then outstanding. For this purpose, the term “maximum annual debt service” shall mean the sum of (i) the interest falling due on serial bonds and term bonds, (ii) the principal amount of serial bonds falling due by their terms, and (iii) the amount of minimum sinking fund payments required, as computed for the year in which such sum shall
be a maximum. Interest during construction which has been funded and provided for shall not be included in “minimum annual debt service” for the purpose of the above calculation.

So long as the debt service ratio shall exceed 1.40, the amount required to be maintained in the Reserve Fund shall be an amount such that the amount in the combined reserve funds of all Parity Bonds then outstanding will at no time be less than the current annual interest requirements on all then outstanding Parity Bonds, except only bonds (if any) for which payment has been provided in advance. If the debt service ratio in any fiscal year shall fall below 1.40, the Treasurer shall set aside in the Reserve Fund or in any other reserve fund or funds established for any one or more issues of the Parity Bonds (on or before the first day of each month of the next succeeding fiscal year) from the first available Net Revenues an amount not less than 15% of the sum of the current monthly interest requirements of all Parity Bonds then outstanding until the next year in which the debt service ratio shall exceed 1.40 or until the aggregate amount in the combined reserve funds established for all of the Parity Bonds (including the Reserve Fund) is equal to the maximum annual debt service on all of the Parity Bonds then outstanding, whichever shall first occur.

For purposes of the above calculation, the interest rates of Bonds which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Bonds bear a rate or rates of interest for a known period or periods of time, such interest rate or rates for such period or periods, and thereafter, for the portion of the calculation period not covered by such known period or periods, the interest rate shall be the greater of the numerical maximum rate that such Bonds may vary or be adjusted to and the numerical maximum rate (if any) that the interest rate for such Bonds may be fixed to, in both cases as set forth in the supplemental resolution authorizing such Bonds, or if such rate or rates have been increased in accordance with such supplemental resolution at such increased rate or rates.

Any amount in the Reserve Fund at any time in excess of the balance required to be then maintained therein shall be released to SMUD for any SMUD use.

SMUD shall not be required, notwithstanding anything herein contained, to maintain in the combined reserve funds appertaining to all Parity Bonds of SMUD, an aggregate amount in excess of the maximum annual debt service requirements in any subsequent fiscal year on all of the then outstanding Parity Bonds.

Any moneys at any time in any of said reserve funds shall be held by the Treasurer in trust for the benefit of the holder or holders from time to time of the Bonds and the coupons appertaining thereto entitled to be paid therewith, and SMUD shall not have any beneficial right or interest in any such moneys.

Notwithstanding the foregoing, a Supplemental Resolution adopted after the Forty-Eighth Supplemental Resolution may provide that a Series of Bonds issued pursuant to such Supplemental Resolution shall not be secured by the Reserve Fund. In such event, (i) payments of the principal of and interest on such Bonds shall be excluded from all calculations made in respect of the amount to be maintained in the Reserve Fund and (ii) amounts on deposit in the Reserve Fund shall not be applied to the payment of the principal of or interest on such Bonds, even if no other moneys are available therefor.
The 2022 Series J Bonds are not secured by the Reserve Fund.

In lieu of maintaining and depositing moneys in the Reserve Fund, SMUD may maintain and deposit in the Reserve Fund, for the sole benefit of the holders of Parity Bonds, a letter of credit (1) which is issued by a bank with a credit rating at the time of deposit of such letter of credit into the Reserve Fund within one of the top two rating categories (without regard to any refinement or graduation of such rating category by numerical modifier or otherwise) of Moody’s Investors Service (“Moody’s”) and Standard & Poor’s Rating Group, a division of The McGraw-Hill Companies, Inc. (“S&P”), (2) the repayment obligation with respect to which is not secured by a lien on assets of SMUD senior to any lien which secures the Bondholders and (3) which has a term of at least 364 days from the date of issuance thereof. If the credit rating of the bank issuing such letter of credit falls below such top two rating categories, SMUD shall within twelve months of such downgrading either (a) substitute a new letter of credit satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or an irrevocable surety bond policy satisfying the requirements of the immediately succeeding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). At least 120 days prior to the expiration date of a letter of credit on deposit in the Reserve Fund, SMUD shall either (a) substitute a new letter of credit satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or an irrevocable surety bond policy satisfying the requirements of the immediately succeeding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). Any such letter of credit shall permit SMUD to draw amounts thereunder for deposit in the Reserve Fund which, together with any moneys on deposit in, or surety bond policy available to fund, the Reserve Fund, are not less than the balance required to then be maintained in the Reserve Fund (the “Reserve Fund Requirement”) and which may be applied to any purpose for which moneys in the Reserve Fund may be applied. SMUD shall make a drawing on such letter of credit and deposit the moneys obtained from drawing in the Reserve Fund (a) whenever moneys are required for the purposes for which Reserve Fund moneys may be applied, and (b) prior to any expiration or termination thereof; provided, however, that no such drawing need be made if other moneys or an irrevocable surety bond are available in the Reserve Fund in the amount of the Reserve Fund Requirement.

In lieu of maintaining and depositing moneys in the Reserve Fund, SMUD also may maintain and deposit in the Reserve Fund, for the sole benefit of the holders of the Bonds, an irrevocable surety bond policy (1) which is issued by a bond insurance company with a claims-paying ability rating at the time of deposit of such surety bond policy into the Reserve Fund within one of the top two rating categories (without regard to any refinement or graduation of such rating category by numerical modifier or otherwise) from Moody’s and S&P, (2) the repayment obligation with respect to which is not secured by a lien on assets of SMUD senior to any lien which secures the Bondholders and (3) has a term of at least 364 days from the date of issuance thereof. If the credit rating of the bond insurance company issuing such surety bond policy falls below such top two rating categories, SMUD shall, within twelve months of such downgrading, either (a) substitute a new surety bond policy satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or a letter of credit satisfying the requirements of the immediately preceding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). At least 120 days prior to the expiration date of a surety bond policy on deposit in the Reserve Fund, SMUD shall either (a) substitute a new surety bond policy satisfying the requirements of this paragraph, (b) fund the Reserve Fund through the deposit of cash or a letter of credit satisfying the requirements of the immediately preceding paragraph or (c) fund the Reserve Fund through a combination of (a) and (b). Any such surety bond policy shall permit SMUD to obtain amounts thereunder for deposit in the Reserve Fund which, together with any moneys on deposit in, or letter of credit available to fund, the Reserve Fund, are not less than the Reserve Fund Requirement and which may be applied to any purpose for which moneys in the Reserve Fund may be applied. SMUD shall make a drawing on such surety bond policy and deposit the proceeds derived from such drawing in the Reserve Fund (a) whenever moneys are required for the purposes for which Reserve Fund moneys may be applied, and (b) prior to any expiration or termination thereof; provided, however,
that no such drawing need be made if other moneys or a letter of credit are available in the Reserve Fund in the amount of the Reserve Fund Requirement.

Notwithstanding anything to the contrary in the prior two paragraphs, if at any time that there is on deposit in the Reserve Fund a combination of cash, a letter of credit and/or a surety bond as contemplated above, SMUD shall draw first on such cash to the extent required and available, then on (1) such surety bond and letter of credit on a pro rata basis (if both a surety bond and letter of credit are available) to the extent required and available, or (2) such surety bond or letter of credit (if either a surety bond or letter of credit, but not both, is available) to the extent required and available.

For purposes of calculating the “debt service ratio” and, unless otherwise specified in a Supplemental Resolution providing for the issuance of a series of Parity Bonds, the amount required to be maintained in the Reserve Fund as described above: (1) any calculation of principal of and interest on Parity Bonds for any period of time shall be reduced by the amount of any Subsidy that SMUD receives or expects to receive during such period of time relating to or in connection with such Parity Bonds; and (2) to the extent the calculation of principal of and interest on Parity Bonds is reduced by the Subsidy as provided in clause (1) of this paragraph, any calculation of Net Revenues for any period of time shall be reduced by the amount of any Subsidy received or expected to be received by SMUD with respect to or in connection with such Parity Bonds during such period of time.

Additional Covenants

The Resolution contains the following additional covenants, among others:

1. That the Electric System will be maintained in good repair, working order and condition at all times, and will be continuously operated in an efficient and economical manner.

2. That no electric energy shall be supplied free by SMUD, and a reasonable wholesale charge will be made for water distributed at any cost to SMUD and such charge will be deemed Revenues; but SMUD may supply without charge water furnished to it without distribution cost, and any moneys received from any retail sales of water will not be deemed Revenues.

3. That all taxes and governmental charges and other lawful claims which might become a lien on the Electric System or the Revenues or impair the security of the Bonds will be paid and discharged when due.

4. That SMUD will comply with all lawful orders of any governmental agency or authority having jurisdiction in the premises (except while the validity or application thereof is being contested in good faith) and with all necessary permits and licenses issued by the NRC.

5. That no lease or agreement will be entered into, or sale or other disposition of essential property made, that would impair the operation of the Electric System or the rights of Bondholders with respect to the Revenues; provided, however, that notwithstanding the foregoing or any other provision of the Master Resolution, SMUD may sell or otherwise dispose of its accounts receivable and customer loan balances due to SMUD provided that SMUD delivers to the Trustee:

   (a) a Certificate of SMUD to the effect that the amount derived by SMUD from the sale or other disposition of such accounts receivable or loan balances is a result of the sale or other disposition of such accounts receivable or loan balances upon fair and reasonable terms no less favorable to SMUD than the terms of a comparable arm’s-length transaction treated as a sale and not a loan under generally accepted accounting principles; and
(b) a written statement or report of an independent certified public accountant to the effect that, based on the audited financial statements of SMUD for the most recent fiscal year for which audited financial statements are available and after giving effect to such transaction by reducing Revenues for such fiscal year by the difference between the face amount of such accounts receivable or loan balances and the amount derived by SMUD from the sale or other disposition of such accounts receivable or loan balances, the debt service ratio computed pursuant to the Master Resolution would not have been reduced to less than 1.40:1.0.

6. That proper records and accounts will be maintained of all transactions relating to the Electric System and the Revenues (open to inspection by the Trustee and the holders of not less than 10 percent in principal amount of the Bonds), to be audited annually by an independent certified public accountant within 90 days after close of the fiscal year, and copies of such financial statements supplied to Bondholders on request.

7. That insurance adequate in amounts and as to risks covered will be maintained against such risks as are usually insurable in connection with similar electric systems, and in addition public liability and property damage insurance in amounts not less than $1,000,000 per accident and adequate fidelity bonds on all officers and employees of SMUD handling or responsible for SMUD funds, subject in each case to the condition that such insurance is obtainable at reasonable rates and upon reasonable terms and conditions. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – INSURANCE” attached to this Official Statement for a description of SMUD’s insurance.

8. That the net proceeds realized by SMUD in the event all or any part of the Electric System is taken by eminent domain proceedings will be applied to the redemption or retirement of all Bonds and Parity Bonds if sufficient therefor, and, if not, then pro rata to the redemption or retirement of Bonds and Parity Bonds or to new facilities if the additional Revenues to be derived therefrom will sufficiently offset the loss of Revenues resulting from such eminent domain so that the ability of SMUD to meet its obligations will not be substantially impaired.

9. That SMUD will at all times use its best efforts to maintain the powers, functions and duties now reposed in it pursuant to law.

10. That SMUD will establish and at all times maintain and collect rates and charges for the sale or use of its electric energy sufficient to permit SMUD to purchase power or issue and sell Bonds or Parity Bonds to finance additions, betterments, extensions and improvements to the Electric System as may be reasonably necessary to satisfy its then projected electric demand upon its Electric System, and that unless the Board determines that SMUD will be able to satisfy such demand through the purchase of electric energy, SMUD will proceed with all reasonable diligence to issue and sell such Bonds or Parity Bonds.

11. That SMUD will not create, or permit the creation of, any mortgage or lien upon the Electric System or any property essential to the proper operation of the Electric System or to the maintenance of the Revenues. SMUD will not create, or permit the creation of, any pledge, lien, charge or encumbrance upon the Revenues except only as provided in the Master Resolution; provided that, notwithstanding the foregoing or any other provision of the Master Resolution, SMUD may create a pledge, lien, charge or encumbrance upon its accounts receivable and customer loan balances due to SMUD (which pledge, lien, charge or encumbrance shall be prior to any pledge, lien, charge or encumbrance created or made pursuant to the Master Resolution, including without limitation the pledge of Revenues made pursuant to the Master Resolution) to secure indebtedness with a term of one year or less provided that the principal amount of such indebtedness does not exceed 50% of the aggregate face amount of the accounts receivable and customer loan balances due to SMUD as shown on SMUD’s most recent audited financial statements.
Amendment of the Resolution

The Resolution and the rights and obligations of SMUD and of the holders of the Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the holders of 60 percent in aggregate principal amount of the Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the holder of each Bond so affected, or (ii) reduce the aforesaid percentage of Bonds required for consent to an amendment or modification, without the consent of the holders of all the Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a series of Bonds, subject to the provisions contained in the Resolution with respect thereto.

Events of Default and Remedies of Bondholders

The Resolution declares each of the following to be an event of default:

(a) Failure to pay the principal of and premium on any Bond when due and payable;

(b) Failure to pay any installment of interest on any Bond when due and payable, if such default continues for a period of 30 days;

(c) Default by SMUD in the observance of any of the covenants, agreements or conditions on its part in the Resolution or in the Bonds, if such default continues for a period of 60 days after written notice thereof (specifying such default and requiring the same to be remedied) has been given to SMUD by the Trustee, or to SMUD and the Trustee by the holders of not less than 25 percent in aggregate principal amount of the Bonds at the time outstanding; and

(d) If, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

In the event of default, the Trustee or the holders of not less than a majority in aggregate principal amount of the outstanding Bonds may, upon written notice to SMUD, declare the principal of all outstanding Bonds, and the interest accrued thereon, to be due and payable immediately. The Trustee is appointed as trustee to represent Bondholders and may take such action as may seem appropriate to it, and, upon the written request of the holders of 25 percent in aggregate principal amount of the outstanding Bonds, and upon being furnished with indemnity satisfactory to it, will take such action on behalf of Bondholders as is specified in such written request. Each Bondholder is entitled to proceed to protect and enforce the rights vested in such holder by the Resolution by such appropriate judicial proceedings as such holder deems most effectual.

The rights of Bondholders are limited and restricted to the use and application of Revenues as provided in the Resolution and do not extend to the levy of any attachment or execution upon or forfeiture of any of the properties of SMUD or to any moneys derived by SMUD from the levy or collection of taxes.

In addition to the limitations on remedies contained in the Resolution, the rights and remedies provided by the Bonds and the Resolution, as well as the enforcement by SMUD of contracts with customers
of the Electric System, may be limited by and are subject to bankruptcy, insolvency, reorganization and other laws affecting the enforcement of creditors’ rights.

**Refunding of 2022 Series J Bonds**

If Refunding Bonds are issued for the purpose of refunding 2022 Series J Bonds, then SMUD is authorized to apply proceeds of the sale of such Refunding Bonds to the payment of the purchase price of direct noncallable obligations of the United States of America (“Treasury Obligations”) to be held by the Trustee to insure the payment or retirement at or before maturity of all or a portion of the outstanding 2022 Series J Bonds. Upon deposit with the Trustee, in trust, of money or Treasury Obligations (including, but not limited to, direct obligations of the United States of America issued in book-entry form on the books of the Department of the Treasury of the United States of America), or any combination thereof, sufficient, together with the interest to accrue on any such Treasury Obligations, to pay or redeem all or a portion of 2022 Series J Bonds then outstanding at or before their maturity date, all liability of SMUD in respect of such 2022 Series J Bonds shall cease, determine and be completely discharged, and the holders thereof shall thereafter be entitled only to payment by SMUD out of the money and Treasury Obligations deposited with the Trustee for their payment. If the liability of SMUD shall cease and determine with respect to all or a portion of the 2022 Series J Bonds, then said 2022 Series J Bonds shall not be considered to be outstanding Bonds for any purpose of the Resolution.

**Discharge of Resolution**

The Resolution may be discharged by depositing with the Trustee in trust, moneys or Federal Securities or general obligation bonds of the State of California, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Bonds at or before their respective maturity dates.

**Investment of Funds**

Moneys in any fund established by the Resolution may be invested in bonds, notes, certificates of indebtedness, bills, bankers acceptances or other securities in which funds of SMUD may be legally invested as provided by the law in effect at the time of such investment. Currently this investment authority includes, among other things, the Local Agency Investment Fund which is administered by the Treasurer of the State of California for the investment of funds belonging to local agencies in the State of California.
APPENDIX E

PROPOSED FORM OF LEGAL OPINION FOR 2022 SERIES J BONDS

[Closing Date]

Sacramento Municipal Utility District
Sacramento, California

Sacramento Municipal Utility District
Electric Revenue Refunding Bonds, 2022 Series J
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Sacramento Municipal Utility District ("SMUD") in connection with the issuance of $_________ aggregate principal amount of Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2022 Series J (the “2022 Series J Bonds”), issued pursuant to Resolution No. 6649 of the Board of Directors of SMUD, adopted January 7, 1971 (the “Master Resolution”), as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. 22-05-__, adopted May 19, 2022 (the “Sixty-Fifth Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

In such connection, we have reviewed the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2022 Series J Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2022 Series J Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2022 Series J Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Resolution and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2022 Series J Bonds to be included in gross income for federal income tax purposes.

We call attention to the fact that the rights and obligations under the 2022 Series J Bonds, the Resolution and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State
of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement, dated ______, 2022, or other offering material relating to the 2022 Series J Bonds and express no opinion or conclusion with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2022 Series J Bonds constitute the valid and binding limited obligations of SMUD.

2. The Resolution, including the Sixty-Fifth Supplemental Resolution, has been duly adopted by, and constitutes the valid and binding obligation of, SMUD. The Resolution creates a valid pledge, to secure the payment of the principal of and interest on the 2022 Series J Bonds, of the Net Revenues, subject to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.

3. Interest on the 2022 Series J Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the 2022 Series J Bonds is not a specific preference item for purposes of the federal alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2022 Series J Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per
APPENDIX F

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the “Disclosure Agreement”) is executed and delivered by the Sacramento Municipal Utility District (the “Issuer”) and U.S. Bank Trust Company, National Association, in its capacity as Dissemination Agent (the “Dissemination Agent”) in connection with the issuance of $________ aggregate principal amount of Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2022 Series J (the “2022 Series J Bonds”). The 2022 Series J Bonds are being issued pursuant to the Issuer’s Resolution No. 6649, adopted on January 7, 1971, as amended and supplemented by supplemental resolutions, including Resolution No. 22-05-__, adopted on May 19, 2022 (the “Resolution”). Pursuant to Section 140.11 of the Resolution, the Issuer and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Issuer and the Dissemination Agent for the benefit of the Holders and Beneficial Owners of the 2022 Series J Bonds and in order to assist the Participating Underwriters in complying with S.E.C. Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Resolution, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Beneficial Owner” shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2022 Series J Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Disclosure Representative” shall mean the Treasurer of the Issuer or his or her designee, or such other officer or employee as the Issuer shall designate in writing to the Trustee from time to time.

“Dissemination Agent” shall mean the U.S. Bank Trust Company, National Association, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Trustee a written acceptance of such designation.

“EMMA” shall mean the MSRB’s Electronic Municipal Market Access system.

“Financial Obligation” shall mean, for purposes of the Listed Events set out in Section 5(a)(15) and Section 5(a)(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“MSRB” shall mean the Municipal Securities Rulemaking Board.

“Participating Underwriter” shall mean any of the original underwriters of the 2022 Series J Bonds required to comply with the Rule in connection with offering of the 2022 Series J Bonds.
“Repository” shall mean the MSRB through EMMA or any other entity or system designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of California.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than one hundred eighty (180) days after the end of the Issuer’s fiscal year (presently December 31), commencing with the report for the 2022 Fiscal Year, provide to each Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the fiscal year changes for the Issuer, the Issuer shall give notice of such change in the same manner as for a Listed Event under Section 5 hereof.

(b) Not later than fifteen (15) Business Days prior to the dates specified in subsection (a) for providing the Annual Report to each Repository, the Issuer shall provide its respective Annual Report to the Dissemination Agent. If by such date, the Dissemination Agent has not received a copy of the Annual Report from the Issuer, the Dissemination Agent shall contact the Issuer to determine if the Issuer is in compliance with the first sentence of this subsection (b).

(c) If the Dissemination Agent is unable to verify that an Annual Report of the Issuer has been provided to each Repository by the date required in subsection (a), the Dissemination Agent shall send a notice to each Repository and the MSRB (if the MSRB is not a Repository) in substantially the form attached as Exhibit A.

(d) The Dissemination Agent shall:

(1) determine each year prior to the date for providing the Annual Report the name and address of each Repository and the then-applicable rules and procedures for filing the Annual Report with each Repository, if any; and

(2) file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, stating the date it was provided and listing each Repository to which it was provided.

SECTION 4. Content of Annual Reports.

(a) The Issuer’s Annual Report shall contain or include by reference the following:

(1) The audited financial statements of the Issuer for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board and where not in conflict with the Financial Accounting Standards Board (“FASB”) pronouncements or accounting principles prescribed by FASB. If the Issuer’s audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall
contain unaudited financial statements, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(2) An update of the following types of information contained in Appendix A to the official statement, dated ______, 2022 and related to the 2022 Series J Bonds:

   (i) The table entitled “Power Supply Resources.”

   (ii) The table entitled “Projected Requirements and Resources to Meet Load Requirements.”

   (iii) The table entitled “Average Class Rates” (to the extent such table relates to rates and revenues of the Issuer).

   (iv) The table entitled “Selected Operating Data.”

   (v) The table entitled “Unconsolidated Financial Data.”

   (vi) The balance in the Decommissioning Trust Fund, the current estimate of decommissioning costs, the decommissioning costs to date, and the annual contribution level to the Decommissioning Trust Fund, all relating to the Rancho Seco Nuclear Power Plant.

   (vii) The table entitled “Estimated Capital Requirements.”

(b) Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or public entities related thereto, which have been submitted to each Repository or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Listed Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the 2022 Series J Bonds not later than ten (10) business days after the occurrence of the event:

   (1) principal and interest payment delinquencies;

   (2) non-payment related defaults, if material;

   (3) unscheduled draws on any applicable debt service reserves reflecting financial difficulties;

   (4) unscheduled draws on credit enhancement reflecting financial difficulties;

   (5) substitution of credit or liquidity providers, or their failure to perform;

   (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 TEB) or other material notices or determinations with respect to the tax status of the 2022 Series J Bonds or other material events adversely affecting the tax status of the 2022 Series J Bonds;
(7) modifications to rights of Bondholders, if material;
(8) bond calls, if material, and tender offers;
(9) defeasances;
(10) release, substitution or sale of property securing repayment of the 2022 Series J Bonds, if material;
(11) rating changes;
(12) bankruptcy, insolvency, receivership or similar event of the Issuer;
(13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
(14) appointment of a successor or additional trustee or the change of name of the Trustee, if material;
(15) incurrence of a Financial Obligation of the Issuer, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect Bondholders, if material; and
(16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(b) For the purpose of the event identified in Section 5(a)(12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer.

(c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event, the Issuer shall as soon as possible determine if such event is required to be reported pursuant to this Section 5.

(d) If the Issuer has determined that such event is required to be reported pursuant to this Section 5, the Issuer shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection (e).

(e) If the Dissemination Agent has been instructed by the Issuer to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB (if the MSRB is not a Repository) and each Repository.
SECTION 6. Termination of Reporting Obligation. The obligations of the Issuer and the Dissemination Agent under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2022 Series J Bonds. If such termination occurs prior to the final maturity of the 2022 Series J Bonds, the Issuer shall give notice of such termination in the same manner as for a Listed Event under Section 5.

SECTION 7. Dissemination Agent; Filings.

(a) The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. If at any time there is not any other designated Dissemination Agent, the Issuer shall be the Dissemination Agent. The initial Dissemination Agent shall be U.S. Bank Trust Company, National Association.

(b) Unless and until one or more different or additional Repositories are designated or authorized by the Securities and Exchange Commission, all filings with a Repository which are required by this Disclosure Agreement shall be filed with the MSRB through EMMA and shall be in an electronic format and accompanied by such identifying information as prescribed by the MSRB in accordance with the Rule.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the 2022 Series J Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2022 Series J Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (1) is approved by the Holders of 60% of the 2022 Series J Bonds, or (2) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the 2022 Series J Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in its next respective Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles from those described in Section 4(a)(1), on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (1) notice of such change shall be given in the same manner as for a Listed Event under Section 5, and (2) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.
SECTION 9. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 10. Default. In the event of a failure of the Issuer or the Dissemination Agent to comply with any provision of this Disclosure Agreement, the Trustee shall, at the request of any Participating Underwriter or the Holders of at least 25% aggregate principal amount of Outstanding Bonds and upon being indemnified to its satisfaction from and against any costs, liability, expenses and fees of the Trustee, including, without limitation fees and expenses of its attorneys, or any Holder or Beneficial Owner of the 2022 Series J Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer or the Dissemination Agent, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Resolution, and the sole remedy under this Disclosure Agreement in the event of any failure of the Issuer or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement, and the Issuer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys’ fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent’s negligence or willful misconduct. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement and no implied duties for obligation shall be read into this Disclosure Agreement against the Dissemination Agent. The Dissemination Agent has no power to enforce nonperformance on the part of the Issuer. The Dissemination Agent shall be paid compensation by the Issuer for its services provided hereunder in accordance with its schedule of fees provided to the Issuer and all expenses, legal fees and costs of the Dissemination Agent made or incurred by the Dissemination Agent in the performance of its duties hereunder. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the 2022 Series J Bonds.

SECTION 12. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Issuer: Sacramento Municipal Utility District
6201 S Street, MS B405
Sacramento, California 95817
Attention: Treasurer
Telephone: (916) 732-6509
Fax: (916) 732-5835
The Issuer, the Dissemination Agent and the Trustee may, by giving written notice hereunder to the other person listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent. Unless specifically otherwise required by the context of this Disclosure Agreement, a party may give notice by any form of electronic transmission capable of producing a written record. Each such party shall file with the Trustee and Dissemination Agent information appropriate to receiving such form of electronic transmission.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the 2022 Series J Bonds, and shall create no rights in any other person or entity.
SECTION 14. **Counterparts.** This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Dated: _____, 2022.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By ________________________________
Treasurer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
as Dissemination Agent

By ________________________________
Authorized Officer

ACKNOWLEDGED:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By: ________________________________
Authorized Officer
EXHIBIT A

NOTICE TO REPOSITORIES OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer: Sacramento Municipal Utility District
Name of Bond Issue: Electric Revenue Refunding Bonds, 2022 Series J
Name of Borrower: Sacramento Municipal Utility District
Date of Issuance: _______, 2022

NOTICE IS HEREBY GIVEN that the Sacramento Municipal Utility District (the “Issuer”) has not provided an Annual Report with respect to the above-named Bonds as required by Section 140.11 of Resolution No. 22-05-__, adopted May 19, 2022, by the Issuer. [The Issuer anticipates that the Annual Report will be filed by _____________.]

Dated: ________________

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
on behalf of Sacramento Municipal Utility District

cc: Sacramento Municipal Utility District
NEW ISSUE- FULL BOOK-ENTRY

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD, based upon an analysis of existing laws, regulations, rulings and court decisions and, assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2022 Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. In the further opinion of Bond Counsel, interest on the 2022 Subordinated Bonds is not a specific preference item for purposes of the federal alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2022 Subordinated Bonds. See “TAX MATTERS.”

$[PRINCIPAL AMOUNT]*

| Subordinated Electric Revenue Refunding Bonds |
|---|---|
| **2022 Series C** |

Dated: Date of Delivery

Due: See “SUMMARY OF THE OFFERING” herein

The Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “2022 Subordinated Bonds”) will be issued pursuant to Resolution No. 85-11-1 of the Sacramento Municipal Utility District (“SMUD”), adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001, as supplemented and amended, and will be payable from the Net Subordinated Revenues of the Electric System of SMUD, as described herein. The 2022 Subordinated Bonds are being issued to (i) refund certain of SMUD’s outstanding Senior Bonds (as defined herein) [and (ii) pay certain costs associated with the issuance of the 2022 Subordinated Bonds]. See “PLAN OF FINANCE.”

The 2022 Subordinated Bonds will initially be issued in the Index Mode and will mature on the date[s], bear interest initially at the Index Rate, for the initial Index Rate Period ending on the date and be subject to mandatory purchase on the initial scheduled Mandatory Purchase Date as described in the “SUMMARY OF THE OFFERING” following this cover page. The 2022 Subordinated Bonds may, under certain circumstances, be converted to a Daily Mode, Weekly Mode, Flexible Mode, Index Mode, Direct Purchase Index Mode or Fixed Rate Mode and may be converted from one Index Rate Period to another Index Rate Period. The 2022 Subordinated Bonds are subject to mandatory tender in the event of any such conversion. See “THE 2022 SUBORDINATED BONDS – Conversion Between Modes” and “– Mandatory Purchase on the Mandatory Purchase Date.” This Official Statement provides information as of its date concerning the 2022 Subordinated Bonds while bearing interest in the Index Mode for the initial Index Rate Period only. Owners and prospective purchasers of the 2022 Subordinated Bonds should not rely on this Official Statement for information concerning the 2022 Subordinated Bonds in connection with any conversion of the 2022 Subordinated Bonds to a different Interest Rate Mode or to a new Index Rate Period, but should look solely to the offering document to be used in connection with any such conversion.

The 2022 Subordinated Bonds are also subject to optional and mandatory redemption and mandatory tender prior to maturity as set forth herein. See “THE 2022 SUBORDINATED BONDS – Mandatory Purchase on the Mandatory Purchase Date,” “– Optional Redemption” and “– Mandatory Sinking Fund Redemption” herein.

While in the Index Mode, interest on the 2022 Subordinated Bonds shall be payable on the first Business Day of each month, commencing on [______], 2022, and on any Mandatory Purchase Date therefor.

The 2022 Subordinated Bonds are being issued in denominations of $100,000 and any integral multiple of $5,000 in excess thereof as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the 2022 Subordinated Bonds, and individual purchases of the 2022 Subordinated Bonds will be made in book-entry form only. Principal or purchase price of, premium, if any, and interest on the 2022 Subordinated Bonds will be payable by U.S. Bank Trust Company, National Association, as trustee (the “Trustee”) to DTC, which is obligated in turn to remit such principal or purchase price, premium, if any, and interest to its DTC Participants for subsequent disbursement to the beneficial owners of the 2022 Subordinated Bonds, as described herein.

The principal of and interest on the 2022 Subordinated Bonds, together with the debt service on other Subordinated Bonds and Parity Subordinated Debt (as defined herein), are payable exclusively from and secured by a
pledge of the Net Subordinated Revenues of the Electric System of SMUD. Neither the credit nor the taxing power of SMUD or the State of California is pledged to the payment of the 2022 Subordinated Bonds. Payment of the principal of and interest on the Subordinated Bonds, including the 2022 Subordinated Bonds, is subordinated to the payment of principal and interest on SMUD's Electric Revenue Bonds and other Parity Bonds (as defined herein).

The information presented on this cover page is for general reference only and is qualified in its entirety by reference to the entire Official Statement and the documents summarized and described herein.

The 2022 Subordinated Bonds are offered when, as and if issued and received by the Underwriters, subject to the approval of the validity of the 2022 Subordinated Bonds and certain other legal matters by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. Certain legal matters will be passed on for the Underwriters by their counsel, Nixon Peabody LLP, San Francisco, California. It is expected that the 2022 Subordinated Bonds will be available for delivery through the facilities of DTC on or about ________, 2022.

Morgan Stanley

BofA Securities
Barclays
Citigroup

Goldman Sachs & Co. LLC
J.P. Morgan

________, 2022

* Preliminary, subject to change.
SUMMARY OF THE OFFERING

PRINCIPAL AMOUNT
Subordinated Electric Revenue Refunding Bonds
2022 Series C

Maturity Date[s]:
- August 15, 20[__]*
- August 15, 20[__]*
- August 15, 20[__]*

Initial Interest Rate Mode:
Index Mode

End of Initial Index Rate Period:
[_______], 20[__]*

Initial Scheduled Mandatory Purchase Date:
[_______], 20[__]*

Index for Initial Index Rate Period:
SIFMA Index

Index Spread[s] for Initial Index Rate Period:
- + ____% for the August 15 20[__) maturity
- + ____% for the August 15 20[__) maturity
- + ____% for the August 15 20[__) maturity

Price:
100%

Call Protection Date for Initial Index Rate Period:
[_______], 20[__]*

CUSIP No[s].†:

* Preliminary, subject to change.
† CUSIP® is a registered trademark of the American Bankers Association. CUSIP® data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers have been assigned by an independent company not affiliated with SMUD or the Underwriters and are included solely for the convenience of the registered owners of the applicable 2022 Subordinated Bonds. Neither SMUD nor the Underwriters are responsible for the selection or uses of these CUSIP® numbers, and no representation is made as to their correctness on the applicable 2022 Subordinated Bonds or as included herein. The CUSIP® number for a specific maturity is subject to being changed after the execution and delivery of the 2022 Subordinated Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of the 2022 Subordinated Bonds.
SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS
Brandon Rose, President
Heidi Sanborn, Vice President
Nancy Bui-Thompson
Gregg Fishman
Rosanna Herber
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES
Paul Lau, Chief Executive Officer and General Manager
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Interim Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Frankie McDermott, Chief Operating Officer
Lora Anguay, Chief Zero Carbon Officer
Jennifer Davidson, Chief Financial Officer
Farres Everly, Director, Communications, Marketing and Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

SPECIAL SERVICES
ORRICK, HERRINGTON & SUTCLIFFE LLP
Bond Counsel

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
Trustee and Paying Agent

BAKER TILLY VIRCHOW KRAUSE, LLP, Madison, Wisconsin
Independent Accountants

PFM FINANCIAL ADVISORS LLC, Philadelphia, Pennsylvania
Municipal Advisor

[________]
Verification Agent

1 The previous Chief Diversity Officer, Gary King, retired as of March 31, 2022. The Chief Diversity Officer position is currently being filled on a rotational interim basis. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – INTRODUCTION – Independent Governance – Chief Diversity Officer.”
No dealer, broker, salesperson or other person has been authorized by SMUD or the Underwriters to give any information or to make any representations with respect to the 2022 Subordinated Bonds other than those contained in this Official Statement and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell nor the solicitation of an offer to buy, nor shall there be any sale of the 2022 Subordinated Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from SMUD and other sources which are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of, the Underwriters. The information and expressions of opinion stated herein are subject to change without notice. The delivery of this Official Statement shall not, under any circumstances, create any implication that there has been no change in the affairs of SMUD since the date hereof. The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with and as part of their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The 2022 Subordinated Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption from the registration requirements contained in such Act. The 2022 Subordinated Bonds have not been registered or qualified under the securities laws of any state.

IN CONNECTION WITH THE OFFERING OF THE 2022 SUBORDINATED BONDS, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OF SUCH BONDS AT LEVELS ABOVE THOSE THAT MIGHT OTHERWISE PREVAIL ON THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITERS MAY OFFER AND SELL THE 2022 SUBORDINATED BONDS TO CERTAIN DEALERS AND OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES SET FORTH ON THE COVER PAGE HEREOF AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT

Certain statements included or incorporated by reference in this Official Statement constitute “forward-looking statements.” Such statements generally are identifiable by the terminology used, such as “plan,” “expect,” “estimate,” “budget” or other similar words.

The achievement of certain results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements described to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. SMUD does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations or events, conditions or circumstances on which such statements are based occur.

This Official Statement, including any supplement or amendment hereto, is intended to be deposited with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access website. SMUD maintains a website. However, the information presented therein is not part of this Official Statement and should not be relied upon in making investment decisions with respect to the 2022 Subordinated Bonds. The references to internet websites in this Official Statement are shown for reference and convenience only; unless explicitly stated to the contrary, the information contained within the websites is not incorporated herein by reference and does not constitute part of this Official Statement.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>PLAN OF FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>ESTIMATED SOURCES AND USES OF FUNDS</td>
<td>3</td>
</tr>
<tr>
<td>THE 2022 SUBORDINATED BONDS</td>
<td>4</td>
</tr>
<tr>
<td>General</td>
<td>4</td>
</tr>
<tr>
<td>Index Rate</td>
<td>5</td>
</tr>
<tr>
<td>Conversion Between Modes</td>
<td>6</td>
</tr>
<tr>
<td>Mandatory Purchase on the Mandatory Purchase Date</td>
<td>6</td>
</tr>
<tr>
<td>Optional Redemption</td>
<td>7</td>
</tr>
<tr>
<td>Mandatory Sinking Fund Redemption</td>
<td>8</td>
</tr>
<tr>
<td>Selection of Bonds to be Redeemed; Notice of Redemption</td>
<td>8</td>
</tr>
<tr>
<td>DEBT SERVICE SCHEDULE</td>
<td>9</td>
</tr>
<tr>
<td>SECURITY FOR THE SUBORDINED BONDS</td>
<td>9</td>
</tr>
<tr>
<td>Limited Obligations; Pledge of Revenues</td>
<td>9</td>
</tr>
<tr>
<td>Subordinate Pledge</td>
<td>10</td>
</tr>
<tr>
<td>No Reserve Fund</td>
<td>10</td>
</tr>
<tr>
<td>Rates and Charges</td>
<td>11</td>
</tr>
<tr>
<td>Limitations on Additional Obligations Payable from Net Subordinated Revenues</td>
<td>11</td>
</tr>
<tr>
<td>SACRAMENTO MUNICIPAL UTILITY DISTRICT</td>
<td>13</td>
</tr>
<tr>
<td>ABSENCE OF LITIGATION REGARDING THE 2022 SUBORDINATED BONDS</td>
<td>13</td>
</tr>
<tr>
<td>UNDERWRITING</td>
<td>13</td>
</tr>
<tr>
<td>MUNICIPAL ADVISOR</td>
<td>14</td>
</tr>
<tr>
<td>APPROVAL OF LEGAL PROCEEDINGS</td>
<td>155</td>
</tr>
<tr>
<td>FINANCIAL STATEMENTS</td>
<td>155</td>
</tr>
<tr>
<td>TAX MATTERS</td>
<td>15</td>
</tr>
<tr>
<td>CONTINUING DISCLOSURE UNDERTAKING</td>
<td>177</td>
</tr>
<tr>
<td>RATINGS</td>
<td>188</td>
</tr>
<tr>
<td>VERIFICATION</td>
<td>188</td>
</tr>
<tr>
<td>MISCELLANEOUS</td>
<td>188</td>
</tr>
<tr>
<td>APPENDIX A – INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT</td>
<td>A-1</td>
</tr>
<tr>
<td>APPENDIX B – 2020 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS AND REPORT OF INDEPENDENT ACCOUNTANTS</td>
<td>B-1</td>
</tr>
<tr>
<td>APPENDIX C – BOOK-ENTRY SYSTEM</td>
<td>C-1</td>
</tr>
<tr>
<td>APPENDIX D – SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION</td>
<td>D-1</td>
</tr>
<tr>
<td>APPENDIX E – SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION</td>
<td>E-1</td>
</tr>
</tbody>
</table>

4135-2990-7767.3
# TABLE OF CONTENTS
(continued)

APPENDIX F – PROPOSED FORM OF LEGAL OPINION FOR 2022 SUBORDINATED BONDS .................................................................................................................................................. F-1

APPENDIX G – FORM OF CONTINUING DISCLOSURE AGREEMENT ........................................... G-1
OFFICIAL STATEMENT

Relating to

SACRAMENTO MUNICIPAL UTILITY DISTRICT

$[PRINCIPAL AMOUNT]*
Subordinated Electric Revenue Refunding Bonds
2022 Series C

INTRODUCTION

This Official Statement, including the cover page and Appendices attached hereto, describes the Sacramento Municipal Utility District (“SMUD”), a political subdivision of the State of California (the “State”), and its $[PRINCIPAL AMOUNT]* Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “2022 Subordinated Bonds”), in connection with the sale by SMUD of the 2022 Subordinated Bonds. The 2022 Subordinated Bonds are being issued to (i) refund certain of SMUD’s outstanding Senior Bonds (as defined herein) (the “Refunded Bonds”) and (ii) pay certain costs associated with the issuance of the 2022 Subordinated Bonds. See “PLAN OF FINANCE.”

The 2022 Subordinated Bonds are being issued pursuant to Resolution No. 85-11-1 of SMUD, adopted November 7, 1985, as amended and restated by Resolution No. 01-06-10 (the “Subordinate Master Resolution”), as supplemented and amended, and pursuant to applicable California law, including the Municipal Utility District Act (Public Utilities Code Sections 12850 to 12860) (the “Act”), the Revenue Bond Law of 1941 (Government Code Section 54300 et seq.) and Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (Government Code Section 53580 et seq.). The issuance of the 2022 Subordinated Bonds was authorized on May 19, 2022, by a resolution of the Board of Directors of SMUD (the “2022 Supplemental Resolution”). The Subordinate Master Resolution and all supplemental resolutions, including the 2022 Supplemental Resolution, are collectively referred to herein as the Subordinate Resolution. See APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION.”

The 2022 Subordinated Bonds and other bonds issued on a parity therewith pursuant to the Subordinate Resolution are collectively referred to herein as the “Subordinated Bonds.” As of May 1, 2022, Subordinated Bonds in the aggregate principal amount of $200,000,000 were outstanding under the Subordinate Resolution.

U.S. Bank Trust Company, National Association serves as trustee and paying agent under the Subordinate Resolution (the “Trustee”).

The payment of the principal of and interest on the Subordinated Bonds, including the 2022 Subordinated Bonds, is subordinate to the payment of the principal of and interest on SMUD’s Electric Revenue Bonds (the “Senior Bonds”) and other Parity Bonds. As of May 1, 2022, Senior Bonds in the aggregate principal amount of $1,966,925,000 were outstanding. Immediately following the issuance of the 2022 Subordinated Bonds and the refunding of the Refunded Bonds, Senior Bonds in the aggregate principal amount of $[_______]* will be outstanding. See “PLAN OF FINANCE.” The Senior Bonds are issued pursuant to Resolution No. 6649 (the “Senior Bond Resolution”) adopted in 1971, as amended and supplemented. See APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION.”

* Preliminary, subject to change.

4135-2990-7767.3
SMUD also issues commercial paper notes (the “Notes”) from time to time. As of May 1, 2022, no Notes were outstanding. Currently, Notes in the aggregate principal amount of $300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD’s obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds (including the 2022 Subordinated Bonds). Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February and August of 2025.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the “Revolving Credit Facility”) in February 2022. As of May 1, 2022, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to $100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD’s payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds (including the 2022 Subordinated Bonds). The current term of the Revolving Credit Facility expires in February 2026.

SMUD is responsible for the acquisition, generation, transmission and distribution of electric power to its service area, which includes most of Sacramento County and small portions of Placer and Yolo counties. For the year ended December 31, 2021, SMUD served a population of approximately 1.5 million with a total annual retail load of approximately 10,453 million kilowatt hours (“kWh”). SMUD owns and operates an electric system which, as of March 31, 2022, included generating facilities owned and operated by SMUD with an aggregate generating capacity of approximately 809 megawatts (“MW”), local gas-fired plants owned and operated by a joint powers authority and managed by SMUD with an aggregate generating capacity of approximately 1,081 MW, over which SMUD has exclusive control of dispatch, and purchased power with an aggregate generating capacity of approximately 1,366 MW and transmission and distribution facilities. SMUD’s power requirements exceed its generating capacity and thus SMUD has agreements with others (including the Local Gas-Fired Plants as defined in APPENDIX A) for the purchase of a portion of its power requirements. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – POWER SUPPLY AND TRANSMISSION – Power Supply Resources.” Continuing development of SMUD’s business strategy in response to changing environmental and regulatory requirements has had, and is expected to continue to have, a major effect on SMUD’s power supply planning. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – BUSINESS STRATEGY.”

Pursuant to a Continuing Disclosure Agreement, dated the date of issuance of the 2022 Subordinated Bonds (the “Continuing Disclosure Agreement”) between SMUD and the Trustee, SMUD will covenant for the benefit of the holders of the 2022 Subordinated Bonds and owners of beneficial interest in the 2022 Subordinated Bonds to provide certain financial information and operating data and to provide certain notices. See “CONTINUING DISCLOSURE UNDERTAKING” and APPENDIX G – “FORM OF CONTINUING DISCLOSURE AGREEMENT.”

The information presented in this Introduction is qualified in its entirety by reference to this entire Official Statement and the documents summarized or described herein. This Official Statement, including the Appendices, summarizes the terms of the 2022 Subordinated Bonds, the Subordinate
Resolution and certain agreements, contracts and other arrangements, some of which currently exist and others of which may exist in the future. The summaries of and references to all documents, statutes, regulations and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each such document, statute, regulation or instrument.

Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION – Certain Definitions” or in the Subordinate Resolution.

PLAN OF FINANCE

The proceeds of the 2022 Subordinated Bonds will be used to (i) refund the $157,785,000 outstanding principal amount of the Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2012 Series Y maturing after August 15, 2022 (the “Refunded Bonds”) [and (ii) pay certain costs associated with the issuance of the 2022 Subordinated Bonds]. In anticipation of the issuance of the 2022 Subordinated Bonds and the refunding of the Refunded Bonds, SMUD entered into an interest rate swap agreement with Morgan Stanley Capital Services, Inc. in December of 2019 with an effective date of July 20, 2022. See APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Interest Rate Swap Agreements.”

A portion of the proceeds of the 2022 Subordinated Bonds, together with other available funds, will be deposited in trust in an escrow fund (the “Escrow Fund”) established under an escrow agreement between SMUD and the Trustee. The moneys so deposited will be invested in direct obligations of the United States of America (the “Federal Securities”), the interest on and principal of which will be sufficient to pay the interest on the Refunded Bonds due on August 15, 2022 (the “Redemption Date”) and to redeem the Refunded Bonds on the Redemption Date. Upon deposit, all liability of SMUD with respect to the Refunded Bonds (except for the obligation of SMUD to pay the interest on and redemption price of the Refunded Bonds from moneys on deposit in the Escrow Fund) will cease. The holders of the Refunded Bonds will be entitled to payment from SMUD solely from moneys or Federal Securities on deposit in the Escrow Fund, and the Refunded Bonds will no longer be outstanding under the Senior Bond Resolution. The Federal Securities and moneys in the Escrow Fund will not secure the 2022 Subordinated Bonds and will not be available to pay the principal of or interest on the 2022 Subordinated Bonds.

ESTIMATED SOURCES AND USES OF FUNDS

The estimated sources and uses of funds with respect to the 2022 Subordinated Bonds are as follows:

Sources of Funds:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Amount of 2022 Subordinated Bonds</td>
<td></td>
</tr>
<tr>
<td>SMUD Contribution</td>
<td></td>
</tr>
</tbody>
</table>

Total Sources of Funds $ 

Uses of Funds:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refunding of Refunded Bonds</td>
<td></td>
</tr>
<tr>
<td>Costs of Issuance (including Underwriters’ Discount)</td>
<td></td>
</tr>
</tbody>
</table>

Total Uses of Funds $
THE 2022 SUBORDINATED BONDS

The following is a summary of certain provisions of the 2022 Subordinated Bonds. Reference is made to the 2022 Subordinated Bonds for the complete text thereof and to the Subordinate Resolution for a more detailed description of such provisions. The discussion herein is qualified by such reference. This Official Statement provides information as of its date with respect to 2022 Subordinated Bonds bearing interest in the Index Mode for the initial Index Rate Period only. Owners and prospective purchasers of the 2022 Subordinated Bonds should not rely on this Official Statement for information concerning the 2022 Subordinated Bonds in connection with any conversion of the 2022 Subordinated Bonds to a different Interest Rate Mode or to a new Index Rate Period, but should look solely to the offering document to be used in connection with any such conversion.

General

The 2022 Subordinated Bonds are being issued in the principal amount shown on the cover of this Official Statement. The 2022 Subordinated Bonds will be issued under a book-entry only system, and will be registered in the name of Cede & Co., as nominee for The Depository Trust Company (“DTC”), New York, New York, which will act as bond depository for the 2022 Subordinated Bonds. Principal or redemption price of, premium, if any, and interest on the 2022 Subordinated Bonds or the purchase price thereof are payable by the Trustee to DTC, which is obligated in turn to remit such principal or redemption price, premium, if any, and interest or purchase price to its DTC Participants for subsequent disbursement to the beneficial owners of the 2022 Subordinated Bonds. See APPENDIX C – “BOOK-ENTRY SYSTEM”.

The 2022 Subordinated Bonds will be dated the date of initial delivery. The 2022 Subordinated Bonds will initially be issued in the Index Mode and will mature on the date[s], bear interest initially at the Index Rate for the initial Index Rate Period ending on the date and be subject to mandatory purchase on the initial scheduled Mandatory Purchase Date as described in the “SUMMARY OF THE OFFERING” following the cover page of this Official Statement.

Subject to the provisions discussed in APPENDIX C – “BOOK-ENTRY SYSTEM,” the 2022 Subordinated Bonds will be issued initially only as fully registered 2022 Subordinated Bonds in the denominations of $100,000 and any integral multiple of $5,000 in excess thereof (the “Authorized Denominations”) while in the Index Mode. Principal or redemption price will be payable upon surrender of the 2022 Subordinated Bonds at the principal corporate trust office of the Trustee. Interest on the 2022 Subordinated Bonds will be paid by wire transfer within the continental United States of immediately available funds from the Trustee to the registered owner, determined as of the close of business on the applicable Record Date, at its address as shown on the registration books maintained by the Trustee.

At the option of SMUD and upon certain conditions provided in the Subordinate Resolution, the 2022 Subordinated Bonds may be converted to the Daily Mode, Weekly Mode, Flexible Mode, Term Rate Mode, Index Mode, Direct Purchase Index Mode, or Fixed Rate Mode or may be converted from one Index Rate Period to another Index Rate Period. See “Conversion Between Modes” herein. While the 2022 Subordinated Bonds may, under certain circumstances, be converted to a Daily Mode, Weekly Mode, Flexible Mode, Index Mode, Direct Purchase Index Mode or Fixed Rate Mode and may be converted from one Index Rate Period to a new Index Rate Period, this Official Statement describes the 2022 Subordinated Bonds only during the period in which they bear interest in the Index Mode for the initial Index Rate Period. The 2022 Subordinated Bonds are subject to mandatory tender in the event of any such conversion related thereto. See “Conversion Between Modes” and “Mandatory Purchase on the Mandatory Purchase Date” herein.
Index Rate

During the initial Index Rate Period, the Index Rate will be the per annum rate of interest equal to the SIFMA Index plus [(i) for the 2022 Subordinated Bonds maturing on August 15, 20[___], [___]%, (ii) for the 2022 Subordinate Bonds maturing on August 15, 20[___], [___]%, and (iii) for the 2022 Subordinated Bonds maturing on August 15, 20[___], [___]%, in each case as determined by the Calculation Agent on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day (each an “Index Rate Determination Date”). During the initial Index Rate Period, the Calculation Agent will be the Trustee or any other party appointed by SMUD to act as calculation agent for the 2022 Subordinated Bonds. All percentages resulting from the calculation of the Index Rate will be rounded, if necessary, to the nearest ten-thousandth of a percentage point with five hundred thousandths of a percentage point rounded upward. All dollar amounts used in or resulting from the calculation of the Index Rate will be rounded to the nearest cent with one-half cent being rounded upward. If the Index Rate is not determined by the Calculation Agent on the applicable Index Rate Determination Date, the rate of interest born on the 2022 Subordinated Bonds bearing interest at an Index Rate shall be the rate in effect on the immediately preceding Thursday until the Calculation Agent next determines the Index Rate as required under the Subordinate Resolution. Notwithstanding the foregoing, the 2022 Subordinated Bonds shall not bear interest at an interest rate higher than [12]% per annum (the “Maximum Rate”).

“SIFMA Index” means, as of any Index Rate Determination Date, the level of the index which is issued weekly and which is compiled from the weekly interest rate resets of tax-exempt variable rate issues included in a database maintained by Municipal Market Data which meet specific criteria established from time to time by SIFMA and issued on Wednesday of each week, or if any Wednesday is not a Business Day, the next succeeding Business Day. If the SIFMA Index is no longer published, then “SIFMA Index” shall mean the S&P Municipal Bond 7 Day High Grade Rate Index. If the S&P Municipal Bond 7 Day High Grade Rate Index is no longer published, then “SIFMA Index” shall mean the prevailing rate determined by the Calculation Agent for tax-exempt state and local government bonds meeting criteria determined in good faith by the Calculation Agent to be comparable under the circumstances to the criteria used by SIFMA to determine the SIFMA Index immediately prior to the date on which SIFMA ceased publication of the SIFMA Index. Notwithstanding the foregoing, if the SIFMA Index as determined as provided above would be less than 0.0%, then the SIFMA Index will be deemed to be 0.0%.

“S&P Municipal Bond 7 Day High Grade Rate Index” means for any Index Rate Determination Date, the level of the “S&P Municipal Bond 7 Day High Grade Rate Index” (formerly known as the J.J. Kenny Index) maintained by Standard and Poor’s for a one-week maturity as published each day.

During the initial Index Rate Period, interest on the 2022 Subordinated Bonds shall be payable on the first Business Day of each month, commencing on [______], 2022, on any Mandatory Purchase Date therefor, [and on their respective Maturity Date] (each an “Interest Payment Date”). Interest on the 2022 Subordinated Bonds shall accrue from (and including) the last Interest Payment Date to which interest has been paid (or, if no interest has been paid, commencing on (and including) the date of original authentication and delivery of the 2022 Subordinated Bonds) to (and excluding) the Interest Payment Date on which interest is to be paid. During the initial Index Rate Period, interest on the 2022 Subordinated Bonds shall be computed on the basis of a 365/366-day year for the actual number of days elapsed.

The Record Date for the payment of interest while a 2022 Subordinated Bond is in the Index Mode is the last Business Day before an Interest Payment Date.
Conversion Between Modes

While the 2022 Subordinated Bonds are in the Index Mode, conversions to any other Interest Rate Mode or from one Index Rate Period to another Index Rate Period may only take place on (i) any day that the 2022 Subordinated Bonds are subject to optional redemption if the conversion did not occur and (ii) the day immediately following the last day of the then-current Index Rate Period, in each case upon not less than ten days’ prior written notice from the Trustee to the registered owners of such 2022 Subordinated Bonds.

Upon such conversion, the 2022 Subordinated Bonds will be subject to mandatory purchase on the Mandatory Purchase Date as described herein under “Mandatory Purchase on the Mandatory Purchase Date.” Each conversion of the 2022 Subordinated Bonds from one Interest Rate Mode to another Interest Rate Mode or from one Index Rate Period to a new Index Rate Period shall be subject to the conditions set forth in the Subordinate Resolution, including delivery of a Favorable Opinion of Bond Counsel. In addition, SMUD may rescind any election to convert to another Interest Rate Mode or from one Index Rate Period to another Index Rate Period up to 10:00 a.m., New York City time, on the Business Day preceding the proposed conversion date. In the event that the conditions for a proposed conversion to a new Interest Rate Mode or from one Index Rate Period to another Index Rate Period are not met or SMUD rescinds the direction to convert, (i) such new Interest Rate Mode or new Index Rate Period shall not take effect on the proposed conversion date, notwithstanding any prior notice to the registered owners of such conversion, (ii) the 2022 Subordinated Bonds shall remain in the prior Interest Rate Mode or Index Rate Period and (iii) the 2022 Subordinated Bonds shall be subject to mandatory purchase on the Mandatory Purchase Date as described in the Subordinate Resolution if notice has been sent to the registered owners stating that such Series of 2022 Subordinated Bonds would be subject to mandatory purchase on such date. In no event shall the failure of the 2022 Subordinated Bonds to be converted to another Interest Rate Mode or to a new Index Rate Period be deemed to be a default or an Event of Default.

Mandatory Purchase on the Mandatory Purchase Date

While in the Index Mode, the 2022 Subordinated Bonds are subject to mandatory purchase at the Purchase Price (as defined below) on (i) the first Business Day following the last day of then-current Index Rate Period and (ii) any Conversion Date (or the date that otherwise would have been a Conversion Date had one of the conditions precedent to such Conversion Date not failed to occur (each a “Mandatory Purchase Date”). “Purchase Price” means an amount equal to the principal amount of any 2022 Subordinated Bonds purchased on the applicable Mandatory Purchase Date, plus accrued interest to but excluding such Mandatory Purchase Date (unless the applicable Mandatory Purchase Date for any 2022 Subordinated Bond is an Interest Payment Date for such 2022 Subordinated Bond, in which case the Purchase Price thereof shall be the principal amount thereof, and interest on such 2022 Subordinated Bond shall be paid to the Holder of such 2022 Subordinated Bond in the normal course). Notice of mandatory tender shall be given by the Trustee in writing to the registered owners of such 2022 Subordinated Bonds subject to mandatory tender no less than ten days prior to the applicable Mandatory Purchase Date. From and after the Mandatory Purchase Date, no further interest on the 2022 Subordinated Bonds shall be payable to the registered owners thereof, provided that there are sufficient funds available on the Mandatory Purchase Date to pay the Purchase Price.

On each Mandatory Purchase Date for the 2022 Subordinated Bonds, if the Trustee has not received an amount of remarketing proceeds sufficient to pay the Purchase Price of such 2022 Subordinated Bonds by 12:00 noon, New York City time, on such Purchase Date, the Trustee shall request funds from SMUD in an amount equal to the Purchase Price of all 2022 Subordinated Bonds which have not been successfully remarketed.
The Trustee shall purchase 2022 Subordinated Bonds subject to mandatory tender for purchase on each Mandatory Purchase Date pursuant to the Subordinate Resolution ("Tendered Bonds") from the tendering owners at the applicable Purchase Price by wire transfer in immediately available funds. Funds for the payment of such Purchase Price shall be derived solely from the following sources in the order of priority indicated and neither of SMUD or the Trustee shall be obligated to provide funds from any other source:

(i) immediately available funds on deposit in the Remarketing Proceeds Account established for the 2022 Subordinated Bonds under the Subordinate Resolution; and

(ii) moneys of SMUD on deposit in the District Purchase Account established for the 2022 Subordinated Bonds under the Subordinate Resolution.

Under the Subordinate Resolution, SMUD is obligated to deposit amounts into the District Purchase Account established for the 2022 Subordinated Bonds sufficient to pay the Purchase Price of the 2022 Subordinated Bonds to the extent that amounts on deposit in the Remarketing Proceeds Account established for the 2022 Subordinated Bonds are insufficient therefor. [The failure of SMUD to deposit amounts into the District Purchase Account established for the 2022 Subordinated Bonds when SMUD is obligated to deposit such amounts under the Subordinate Resolution will constitute an Event of Default under the Subordinate Resolution.]

If moneys sufficient to pay the Purchase Price of all Tendered Bonds to be purchased on any Mandatory Purchase Date are not available (1) no purchase shall be consummated of Tendered Bonds on such Mandatory Purchase Date; (2) all Tendered Bonds shall be returned to the Holders thereof; and (3) all remarketing proceeds with respect to such 2022 Subordinated Bonds shall be returned to the applicable remarketing agent for return to the persons providing such moneys. All Tendered Bonds shall bear interest at the Delayed Remarketing Period Rate during the period of time from and including the applicable Mandatory Purchase Date to (but not including) the date that all such Tendered Bonds are successfully remarketed, redeemed or paid (the "Delayed Remarketing Period").

“Delayed Remarketing Period Rate” means, during any Delayed Remarketing Period, for each period of days during such Delayed Remarketing Period set forth below, the per annum interest rate set forth below that corresponds to such period of days:

<table>
<thead>
<tr>
<th>Days During Delayed Remarketing Period</th>
<th>Per Annum Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>[0-89 days]</td>
<td>[____]%</td>
</tr>
<tr>
<td>[90-179 days]</td>
<td>[____]%</td>
</tr>
<tr>
<td>[180 days or more]</td>
<td>Maximum Rate</td>
</tr>
</tbody>
</table>

During the Delayed Remarketing Period, SMUD may (1) direct the conversion of Tendered Bonds without complying with the applicable notice requirements for such conversion, and (2) upon five Business Days’ notice, redeem Tendered Bonds as a whole or in part on any Business Day at a redemption price equal to the principal amount thereof, together with accrued interest thereon to the date fixed for redemption, without premium, and interest on Tendered Bonds will be paid to the Holders thereof (i) on the first Business Day of each calendar month and (ii) on the last day of such period.

Optional Redemption

The 2022 Subordinated Bonds [maturing on August 15, 20[____.]] are subject to redemption at the option of SMUD in whole or in part (provided that no 2022 Subordinated Bonds shall remain Outstanding
except in Authorized Denominations) on any date on or after the Call Protection Date, at a Redemption Price equal to the principal amount, or portions thereof, of such 2022 Subordinated Bonds to be redeemed, without premium, plus accrued interest, if any, to the Redemption Date.

The Call Protection Date for the initial Index Rate Period is [____], 20[__].

**Mandatory Sinking Fund Redemption**

The 2022 Subordinated Bonds [maturing on August 15, 20[__].] are subject to mandatory redemption in part, by lot, on August 15 in the years shown in the following table, at a Redemption Price equal to the principal amount thereof, plus accrued interest, if any, to the date of redemption in an amount equal to the Sinking Fund Installments for such 2022 Subordinated Bonds for such date:

<table>
<thead>
<tr>
<th>Years* (August 15)</th>
<th>Sinking Fund Installment*</th>
<th>Years* (August 15)</th>
<th>Sinking Fund Installment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>†</td>
<td>†</td>
</tr>
</tbody>
</table>

† Stated Maturity

**Selection of Bonds to be Redeemed; Notice of Redemption**

Whenever provision is made for the redemption of less than all of the 2022 Subordinated Bonds, the Trustee shall select the 2022 Subordinated Bonds to be redeemed, from the outstanding 2022 Subordinated Bonds not previously called for redemption, by lot in any manner which the Trustee deems fair.

Notice of redemption shall be mailed by first-class mail by the Trustee, not less than twenty nor more than sixty days prior to the redemption date, to the Holder of any 2022 Subordinated Bond called for redemption, but neither failure to receive such notice nor any defect in any notice so mailed shall affect the sufficiency of the proceedings for the redemption of any of the 2022 Subordinated Bonds. Each notice of redemption shall state the redemption date, the place of redemption, the principal amount to be redeemed, and shall also state that the interest on the 2022 Subordinated Bonds in such notice designated for redemption shall cease to accrue from and after such redemption date and that on said date there will become due and payable on each of said 2022 Subordinated Bonds the principal amount thereof to be redeemed, interest accrued thereon to the redemption date and the premium, if any, thereon (such premium to be specified). Each notice of optional redemption shall also state that redemption is conditioned upon receipt by the Trustee of sufficient funds on the applicable redemption date to pay the applicable redemption price of the 2022 Subordinated Bonds to be redeemed.

Any notice of optional redemption may be rescinded by written notice given to the Trustee by SMUD no later than two Business Days prior to the dated specified for redemption.

Notwithstanding the foregoing, notice of redemption shall not be required for 2022 Subordinated Bonds redeemed on a Mandatory Purchase Date.

---

* Preliminary, subject to change.
The following table sets forth the debt service requirements with respect to the 2022 Subordinated Bonds assuming no early redemptions. See also APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Debt Service Requirements.”

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>2022 Subordinated Bonds Principal</th>
<th>2022 Subordinated Bonds Interest&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Based on an assumed interest rate of ___% per annum.

SECURITY FOR THE SUBORDINATED BONDS

Limited Obligations; Pledge of Revenues

The Subordinated Bonds, including the 2022 Subordinated Bonds, are revenue bonds and are not secured by the taxing power of SMUD. The principal of and premium, if any, and interest on the Subordinated Bonds (including the 2022 Subordinated Bonds), together with other Parity Subordinated Debt, are payable exclusively from the Net Subordinated Revenues of the Electric System of SMUD. The Subordinated Bonds and all other Parity Subordinated Debt are secured by a pledge of Revenues, subject to the condition that out of Revenues:
First: There shall be applied all sums required for maintenance and operation costs of the Electric System and all Energy Payments not included in maintenance and operation costs.

Second: There shall be applied all sums required for the payment of the principal of (including any premium thereon) and interest on the Senior Bonds and all other Parity Bonds, together with any sinking fund or reserve fund payments on the Senior Bonds and all other Parity Bonds.

Third: There shall be applied all sums required for the payment of the principal of (including any premium thereon) and interest on the Subordinated Bonds and all other Parity Subordinated Debt, together with any sinking fund or reserve fund payments on the Subordinated Bonds and all other Parity Subordinated Debt.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes.

From time to time, SMUD may deposit in the Rate Stabilization Fund from such remaining Revenues such amounts as SMUD shall determine, provided that deposits in the Rate Stabilization Fund from remaining Revenues in any fiscal year may be made until (but not after) the date 120 days after the end of such fiscal year. SMUD may withdraw amounts from the Rate Stabilization Fund only for inclusion in Revenues for any fiscal year, such withdrawals to be made until (but not after) 120 days after the end of such fiscal year. All interest or other earnings upon deposits in the Rate Stabilization Fund shall be withdrawn therefrom and accounted for as Revenues. No deposit of Revenues to the Rate Stabilization Fund may be made to the extent such Revenues were included in any certificate submitted in connection with the issuance of additional bonds and withdrawal of the Revenues from the Revenues employed in rendering said certificate would have caused noncompliance with the additional bond provisions. See APPENDIX A – “RATES AND CUSTOMER BASE – Rates and Charges” for a description of the balance in the Rate Stabilization Fund.

Neither the credit nor the taxing power of SMUD is pledged to the payment of the Subordinated Bonds and the general fund of SMUD is not liable for the payment thereof. The owners of the Subordinated Bonds cannot compel the exercise of any taxing power of SMUD or the forfeiture of any of its property. The Subordinated Bonds are not a legal or equitable pledge, charge, lien or encumbrance upon any of SMUD’s property (including the Electric System) or upon any of its income, receipts or revenues except the Net Subordinated Revenues of the Electric System to the extent of the pledge thereof contained in the Subordinate Resolution.

Subordinate Pledge

The Subordinated Bonds are subordinate in right of payment to the Senior Bonds and other Parity Bonds. As of May 1, 2022, Senior Bonds in the aggregate principal amount of $1,966,925,000 were outstanding. Immediately following the issuance of the 2022 Subordinated Bonds and the refunding of the Refunded Bonds, Senior Bonds in the aggregate principal amount of $[______] will be outstanding. The Senior Bonds are issued pursuant to the Senior Bond Resolution. See APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION” for a description of certain provisions of the Senior Bond Resolution.

No Reserve Fund

No reserve fund will be established or funded for the benefit of the 2022 Subordinated Bonds.

* Preliminary, subject to change.
Rates and Charges

SMUD has covenanted in the Subordinate Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Subordinate Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for (1) all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs, (2) all payments with respect to Parity Bonds, and (3) the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on the Subordinated Bonds and all Parity Subordinated Debt, in each case during such 12 months.

For purposes of the calculations of payments to be made pursuant to the Subordinate Resolution, the interest rates on Parity Bonds and Parity Subordinated Debt which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds and Parity Subordinated Debt bear a rate or rates of interest for a known period or periods of time, such rate or rates of interest for such period or periods and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate.

For purposes of the above calculations of principal of and interest on Parity Bonds or Parity Subordinated Debt, if a Financial Products Agreement has been entered into by SMUD with respect to any Parity Bonds or Parity Subordinated Debt, interest on such Parity Bonds or Parity Subordinated Debt shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds or Parity Subordinated Debt in such fiscal year or period at the rate or rates stated in such Parity Bonds or Parity Subordinated Debt plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

For purposes of the above calculations of principal of and interest on Parity Bonds and Parity Subordinated Debt, Excluded Principal Payments shall be disregarded (but interest on the Parity Bonds and Parity Subordinated Debt to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Bonds and Parity Subordinated Debt are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

See Appendix D hereto for the definitions of certain capitalized terms used in this section.

Limitations on Additional Obligations Payable from Net Subordinated Revenues

The Subordinate Resolution provides that SMUD will not, so long as any Subordinated Bonds are outstanding, issue any obligations payable in whole or in part from Net Subordinated Revenues except the following:

(a) Refunding Subordinated Bonds issued to refund all or part of the Parity Bonds or Subordinated Bonds;
(b) Additional Parity Subordinated Debt (including additional Subordinated Bonds under the Subordinate Resolution and additional Parity Subordinated Debt), with an equal lien and charge upon the Net Subordinated Revenues, but only subject to the following conditions:

1. SMUD shall not then be in default under the Senior Bond Resolution, the Subordinate Resolution or other resolutions authorizing the issuance of Parity Bonds or Parity Subordinated Debt payable out of Revenues; and

2. SMUD shall certify to the Trustee (i) that Net Revenues, after completion of any improvements proposed to be financed by such additional Parity Subordinated Debt, will be sufficient to pay the principal of and interest (and bond reserve fund requirements, if any) on all Parity Bonds and Parity Subordinated Debt then outstanding and on such additional Parity Subordinated Debt; and (ii) that Net Revenues, for a period of 12 consecutive months during the 24 months immediately preceding the date upon which such Parity Subordinated Debt shall become outstanding, shall have been at least equal to 1.10 times the sum of (i) the annual interest on Parity Bonds and Parity Subordinated Debt, (ii) the principal amount of Parity Bonds and Parity Subordinated Debt falling due, and (iii) the amount of minimum sinking fund payments falling due on Parity Bonds and Parity Subordinated Debt, all as computed for the year in which such sum shall then be a maximum, including both the then outstanding Parity Bonds and Parity Subordinated Debt and the Parity Subordinated Debt then proposed to be issued.

The calculation described above shall be made by taking the following into consideration:

(A) if rates and charges in effect on the date upon which such Parity Subordinated Debt will become outstanding will be greater than those in effect during the entire twelve months elected for the foregoing computation, then the Net Revenues for said period of twelve months may be augmented by the estimated increase in Net Revenues computed to accrue to the Electric System in the first twelve months during which such rates and charges shall be in effect;

(B) if such Parity Subordinated Debt or any portion thereof shall be issued for the purpose of acquiring an existing revenue-producing electric system, the estimated pro forma net revenues of such existing system (calculated on the basis of assumed SMUD ownership and operation during such period but otherwise on the basis of actual gross revenues of such existing system at the rates actually charged therefor) for the preceding twelve months may be added to the actual Net Revenues of the Electric System for the twelve months elected for said computation and treated as if actually received by the Electric System during those twelve months;

(C) for purposes of the above calculations of principal of and interest on Parity Subordinated Debt, Excluded Principal Payments shall be disregarded (but interest on the Parity Subordinated Debt to which such Excluded Principal Payments relate shall be included until but not after the stated due date when principal payments on such Parity Subordinated Debt are scheduled by their terms to commence) and Assumed Principal Payments and Assumed Interest Payments shall be included;

(D) for purposes of the above calculations, the interest rates on Parity Bonds and Parity Subordinated Debt which bear a variable rate of interest or a rate subject to periodic adjustment or to being fixed at some date after issuance shall be, if such Parity Bonds and Parity Subordinated Debt bear a rate or rates of interest for a known period or periods of time, such interest rate or rates for such period or periods, and thereafter, for the portion of the calculation period not covered by such known period or periods, the Assumed Interest Rate; and
(E) For purposes of the above calculations of principal of and interest on Parity Bonds and Parity Subordinated Debt, if a Financial Products Agreement has been or is being entered into by SMUD with respect to any Parity Bonds or Parity Subordinated Debt, interest on such Parity Bonds or Parity Subordinated Debt shall be included in the calculation of such principal and interest by including for each fiscal year or period an amount equal to the amount of interest payable on such Parity Bonds or Parity Subordinated Debt in such fiscal year or period at the rate or rates stated in such Parity Bonds or Parity Subordinated Debt plus any Financial Product Payments payable in such fiscal year or period minus any Financial Product Receipts receivable in such fiscal year or period; provided that in no event shall any calculation made pursuant to this clause result in a number less than zero being included in the calculation of such principal and interest.

(c) Revenue bonds which are junior and subordinate to the payment of the principal, premium, and interest and reserve fund requirements for the Subordinated Bonds and all Parity Subordinated Debt and which subordinated revenue bonds are payable as to principal, premium, and interest, and also reserve fund requirements, if any, only out of Net Subordinated Revenues after the prior payment of all amounts required to be paid under the Subordinate Resolution from Net Subordinated Revenues for principal, premium, interest and reserve fund requirements for the Subordinated Bonds and all Parity Subordinated Debt, as the same become due and payable.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

SMUD owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. For a full description of SMUD, its history, organization, operations, and financial performance, certain developments in the energy markets, certain factors affecting the electric utility industry and certain regulatory and other matters, see APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT.”

ABSENCE OF LITIGATION REGARDING THE 2022 SUBORDINATED BONDS

SMUD is not aware of any action, suit or proceeding, threatened or pending, to restrain or enjoin the issuance, sale or delivery of the 2022 Subordinated Bonds, or in any way contesting or affecting the validity of the 2022 Subordinated Bonds or any of the proceedings of SMUD taken with respect to the 2022 Subordinated Bonds. SMUD is not aware of any action, suit or proceeding, threatened or pending, questioning the corporate existence of SMUD, or the title of the officers of SMUD to their respective offices, or the power and authority of SMUD to execute and deliver the 2022 Subordinated Bonds. For a description of certain litigation in which SMUD is involved, see APPENDIX A – “INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT – LEGAL PROCEEDINGS.”

UNDERWRITING

Morgan Stanley & Co. LLC, BofA Securities, Inc., Barclays Capital Inc., Citigroup Global Markets, Inc., Goldman Sachs & Co. LLC, and J.P. Morgan Securities LLC (“JPMS”) (each an “Underwriter” and, collectively, the “Underwriters”) have jointly and severally agreed, subject to certain customary conditions to closing, to purchase the 2022 Subordinated Bonds from SMUD at an aggregate purchase price of $_________ (being the aggregate principal amount of the 2022 Subordinated Bonds, [less Underwriters’ discount of $______]). The Underwriters will be obligated to purchase all 2022 Subordinated Bonds if any 2022 Subordinated Bonds are purchased. The Underwriters have agreed to make a public offering of the 2022 Subordinated Bonds at the initial offering price set forth on the inside cover page hereof. The 2022 Subordinated Bonds may be offered and sold to certain dealers (including.
underwriters and other dealers depositing such bonds into investment trusts) at prices lower than such public offering price, and such public offering price may be changed, from time to time, by the Underwriters.

Morgan Stanley & Co. LLC., an Underwriter of the 2022 Subordinated Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the 2022 Subordinated Bonds.

[BofA Securities, Inc., an Underwriter of the 2022 Subordinated Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated (“MLPF&S”). As part of this arrangement, BofA Securities, Inc. may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the 2022 Subordinated Bonds.]

[Citigroup Global Markets Inc., an Underwriter of the 2022 Subordinated Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, “Fidelity”). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.]

[JPMS, one of the Underwriters of the Bonds, has entered into negotiated dealer agreements (each, a “Dealer Agreement”) with each of Charles Schwab & Co., Inc. (“CS&Co.”) and LPL Financial LLC (“LPL”) for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase 2022 Subordinated Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any 2022 Subordinated Bonds that such firm sells.]

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for SMUD for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of, or issued for the benefit of, SMUD.

MUNICIPAL ADVISOR

SMUD has retained PFM Financial Advisors LLC, as Municipal Advisor in connection with various matters relating to the delivery of the 2022 Subordinated Bonds. The Municipal Advisor assumes no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. The Municipal Advisor is an independent advisory firm and is not engaged in underwriting or
distribution of securities. The Municipal Advisor will receive compensation that is contingent upon the sale, issuance and delivery of the 2022 Subordinated Bonds.

**APPROVAL OF LEGAL PROCEEDINGS**

The validity of the 2022 Subordinated Bonds and certain other legal matters are subject to the approval of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD. The approving opinion of Bond Counsel will be delivered with the 2022 Subordinated Bonds in substantially the form appearing in APPENDIX F. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed on for the Underwriters by Nixon Peabody LLP, San Francisco, California, counsel to the Underwriters.

**FINANCIAL STATEMENTS**

SMUD’s audited, consolidated financial statements for the years ended December 31, 2021 and December 31, 2020 are included in APPENDIX B attached to this Official Statement. These financial statements have been audited by Baker Tilly Virchow Krause, LLP, Madison, Wisconsin (the “Auditor”), for the periods indicated and to the extent set forth in their report thereon and should be read in their entirety. SMUD has not requested nor did it obtain permission from the Auditor to include the audited, consolidated financial statements as an appendix to this Official Statement. Accordingly, the Auditor has not performed any procedures to review the financial condition or operations of SMUD subsequent to the date of its report included therein, nor has it reviewed any information contained in this Official Statement.

**TAX MATTERS**

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to SMUD (“Bond Counsel”), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2022 Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the “Code”) and is exempt from State of California personal income taxes. Bond Counsel is of the further opinion that interest on the 2022 Subordinated Bonds is not a specific preference item for purposes of the federal alternative minimum tax. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2022 Subordinated Bonds. A complete copy of the proposed form of opinion of Bond Counsel is set forth in APPENDIX F hereto.

[To the extent the issue price of any maturity of the 2022 Subordinated Bonds is less than the amount to be paid at maturity of such 2022 Subordinated Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2022 Subordinated Bonds), the difference constitutes “original issue discount,” the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2022 Subordinated Bonds which is excluded from gross income for federal income tax purposes and exempt from State of California personal income taxes. For this purpose, the issue price of a particular maturity of the 2022 Subordinated Bonds is the first price at which a substantial amount of such maturity of the 2022 Subordinated Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2022 Subordinated Bonds accrues daily over the term to maturity of such 2022 Subordinated Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2022 Subordinated Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2022 Subordinated Bonds. Beneficial Owners of the 2022 Subordinated Bonds will be required to recognize gain in certain cases and will take the adjustment in determining the basis of any such 2022 Subordinated Bonds.
Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2022 Subordinated Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2022 Subordinated Bonds in the original offering to the public at the first price at which a substantial amount of such 2022 Subordinated Bonds is sold to the public.

2022 Subordinated Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner’s basis in a Premium Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2022 Subordinated Bonds. SMUD has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2022 Subordinated Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2022 Subordinated Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2022 Subordinated Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel’s attention after the date of issuance of the 2022 Subordinated Bonds may adversely affect the value of, or the tax status of interest on, the 2022 Subordinated Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2022 Subordinated Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2022 Subordinated Bonds may otherwise affect a Beneficial Owner’s federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner’s other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2022 Subordinated Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2022 Subordinated Bonds. Prospective purchasers of the 2022 Subordinated Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel expresses no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel’s judgment as to the proper treatment of the 2022 Subordinated Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service (“IRS”) or the courts. Furthermore, Bond Counsel cannot give and has not given any
opinion or assurance about the future activities of SMUD, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. SMUD has covenanted, however, to comply with the requirements of the Code.

Bond Counsel’s engagement with respect to the 2022 Subordinated Bonds ends with the issuance of the 2022 Subordinated Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend SMUD or the Beneficial Owners regarding the tax-exempt status of the 2022 Subordinated Bonds in the event of an audit examination by the IRS. Under current procedures, Beneficial Owners would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which SMUD legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the 2022 Subordinated Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2022 Subordinated Bonds, and may cause SMUD or the Beneficial Owners to incur significant expense.

Payments on the 2022 Subordinated Bonds generally will be subject to U.S. information reporting and possibly to “backup withholding.” Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate Beneficial Owner of 2022 Subordinated Bonds may be subject to backup withholding with respect to “reportable payments,” which include interest paid on the 2022 Subordinated Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the 2022 Subordinated Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number (“TIN”) to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a “notified payee underreporting” described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against a Beneficial Owner’s federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain Beneficial Owners (including among others, corporations and certain tax-exempt organizations) are not subject to backup withholding. The failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

CONTINUING DISCLOSURE UNDERTAKING

Pursuant to the Continuing Disclosure Agreement, SMUD will covenant for the benefit of the holders and the “Beneficial Owners” (as defined in the Continuing Disclosure Agreement) of the 2022 Subordinated Bonds to provide certain financial information and operating data relating to SMUD by not later than 180 days after the end of each of SMUD’s fiscal years (presently, each December 31), commencing with the report for the year ending December 31, 2022 (the “Annual Report”), and to provide notices of the occurrence of certain listed events with respect to the 2022 Subordinated Bonds. The Annual Report will be filed by or on behalf of SMUD with the Municipal Securities Rulemaking Board (the “MSRB”) through its Electronic Municipal Market Access system (“EMMA”) and any notices of such listed events will be filed by or on behalf of SMUD with the MSRB through EMMA. The specific nature of the information to be contained in the Annual Report and the notices of listed events are set forth in the form of the Continuing Disclosure Agreement which is included in its entirety in APPENDIX G hereto. SMUD’s covenant will be made in order to assist the Underwriters in complying with Securities and Exchange Commission Rule 15c2-12.

[In a limited number of circumstances, certain of the annual reports, audited financial statements or listed event filings required to be made by SMUD during the last five years under its continuing disclosure undertakings were not connected to all of the CUSIP numbers of the bonds subject to the continuing disclosure undertakings. In addition, SMUD entered into two subordinated forward starting
interest rate swaps in December 2019 and filed a notice of the interest rate swaps with the MSRB through EMMA in April 2020. A notice of rating upgrade on October 6, 2020, by Moody’s Investors Service of the Northern California Gas Authority No. 1 Gas Project Revenue Bonds, Series 2007B, was also not filed until October 28, 2020.]

RATINGS

Fitch Ratings, Inc. ("Fitch") and S&P Global Ratings ("S&P") have assigned ratings of “[AA (stable outlook)]” and “[AA (stable outlook)],” respectively, to the 2022 Subordinated Bonds. Such ratings reflect only the views of such organizations and are not a recommendation to buy, sell or hold the 2022 Subordinated Bonds. Explanations of the significance of such ratings may be obtained only from the respective rating agencies. SMUD has furnished to Fitch and S&P certain information and materials concerning the 2022 Subordinated Bonds and itself. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that such ratings will continue for any given period or that they will not be revised downward, suspended or withdrawn entirely by the respective rating agencies, if in the judgment of such rating agency, circumstances so warrant. SMUD has not, other than as described under “CONTINUING DISCLOSURE UNDERTAKING” above, and the Underwriters have not undertaken any responsibility either to bring to the attention of the holders or beneficial owners of the 2022 Subordinated Bonds any proposed revision, suspension or withdrawal of any rating on the 2022 Subordinated Bonds or to oppose any such proposed revision, suspension or withdrawal. Any such downward revision, suspension or withdrawal of such ratings may have an adverse effect on the market price or marketability of the 2022 Subordinated Bonds.

VERIFICATION

Upon delivery of the 2022 Subordinated Bonds, [_____] (the “Verification Agent”) will verify, from the information provided to it, the mathematical accuracy as of the date of the closing of the 2022 Subordinated Bonds of the computations contained in the provided schedules to determine that the anticipated receipts from the securities and cash deposits listed in the Underwriters’ schedules, to be held in escrow, will be sufficient to pay, when due, the interest on and redemption requirements of the Refunded Bonds. The Verification Agent will express no opinion on the assumptions provided to them.

MISCELLANEOUS

This Official Statement includes descriptions of the terms of the 2022 Subordinated Bonds, power purchase agreements with certain other parties, pooling and other agreements, the Subordinate Resolution and certain provisions of the Act. Such descriptions do not purport to be complete, and all such descriptions and references thereto are qualified in their entirety by reference to each such document. Copies of the Subordinate Resolution, which forms a contract with the Holders of the 2022 Subordinated Bonds, will be made available upon request.
This Official Statement has been duly authorized by the Board of Directors of SMUD.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: ______________________________________
    Chief Executive Officer and General Manager
APPENDIX A

INFORMATION REGARDING SACRAMENTO MUNICIPAL UTILITY DISTRICT
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>A-1</td>
</tr>
<tr>
<td>General</td>
<td>A-1</td>
</tr>
<tr>
<td>Independent Governance</td>
<td>A-1</td>
</tr>
<tr>
<td>THE SERVICE AREA AND ELECTRIC SYSTEM</td>
<td>A-4</td>
</tr>
<tr>
<td>The Service Area</td>
<td>A-4</td>
</tr>
<tr>
<td>The Electric System</td>
<td>A-5</td>
</tr>
<tr>
<td>BUSINESS STRATEGY</td>
<td>A-5</td>
</tr>
<tr>
<td>General</td>
<td>A-5</td>
</tr>
<tr>
<td>Serving SMUD’s Customers</td>
<td>A-6</td>
</tr>
<tr>
<td>Sustainable Power Supply and Transmission</td>
<td>A-8</td>
</tr>
<tr>
<td>Electricity, Natural Gas, and Related Hedging</td>
<td>A-13</td>
</tr>
<tr>
<td>Managing Risks</td>
<td>A-14</td>
</tr>
<tr>
<td>Competitive Challenges</td>
<td>A-14</td>
</tr>
<tr>
<td>Leveraging Core Competencies</td>
<td>A-15</td>
</tr>
<tr>
<td>FACTORS AFFECTING THE REGION</td>
<td>A-16</td>
</tr>
<tr>
<td>Precipitation Variability</td>
<td>A-16</td>
</tr>
<tr>
<td>Wildfires</td>
<td>A-17</td>
</tr>
<tr>
<td>August 2020 Heat Wave</td>
<td>A-19</td>
</tr>
<tr>
<td>Impacts from COVID-19 Pandemic</td>
<td>A-19</td>
</tr>
<tr>
<td>RATES AND CUSTOMER BASE</td>
<td>A-20</td>
</tr>
<tr>
<td>Rates and Charges</td>
<td>A-20</td>
</tr>
<tr>
<td>Rate Stabilization Funds</td>
<td>A-21</td>
</tr>
<tr>
<td>Low Income Discount</td>
<td>A-22</td>
</tr>
<tr>
<td>Rate Comparisons</td>
<td>A-23</td>
</tr>
<tr>
<td>Allocation of Revenue by Customer Class</td>
<td>A-25</td>
</tr>
<tr>
<td>Customer Base; Largest Customers</td>
<td>A-26</td>
</tr>
<tr>
<td>POWER SUPPLY AND TRANSMISSION</td>
<td>A-27</td>
</tr>
<tr>
<td>Power Supply Resources</td>
<td>A-27</td>
</tr>
<tr>
<td>Power Generation Facilities</td>
<td>A-28</td>
</tr>
<tr>
<td>Fuel Supply</td>
<td>A-31</td>
</tr>
<tr>
<td>Gas Transmission</td>
<td>A-33</td>
</tr>
<tr>
<td>Gas Storage</td>
<td>A-34</td>
</tr>
<tr>
<td>Power Purchase Agreements</td>
<td>A-34</td>
</tr>
<tr>
<td>Transmission Service Agreements</td>
<td>A-37</td>
</tr>
<tr>
<td>Projected Resources</td>
<td>A-39</td>
</tr>
<tr>
<td>Demand Side Management Programs</td>
<td>A-39</td>
</tr>
<tr>
<td>Balancing Authority Area Agreements</td>
<td>A-42</td>
</tr>
<tr>
<td>Power Pool and Other Agreements</td>
<td>A-42</td>
</tr>
<tr>
<td>Other Agreements with PG&amp;E</td>
<td>A-43</td>
</tr>
<tr>
<td>SELECTED OPERATING DATA</td>
<td>A-44</td>
</tr>
<tr>
<td>SELECTED FINANCIAL DATA</td>
<td>A-44</td>
</tr>
<tr>
<td>SMUD Financial Information</td>
<td>A-44</td>
</tr>
<tr>
<td>Financial Information of SMUD and the Authorities</td>
<td>A-46</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS
(continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management’s Discussion of SMUD’s Operating Results</td>
<td>A-47</td>
</tr>
<tr>
<td>RANCHO SECO DECOMMISSIONING</td>
<td>A-48</td>
</tr>
<tr>
<td>EMPLOYEE RELATIONS</td>
<td>A-50</td>
</tr>
<tr>
<td>RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS</td>
<td>A-50</td>
</tr>
<tr>
<td>Pension Plans</td>
<td>A-50</td>
</tr>
<tr>
<td>Other Post-Employment Benefits</td>
<td>A-52</td>
</tr>
<tr>
<td>CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS</td>
<td>A-53</td>
</tr>
<tr>
<td>Estimated Capital Requirements</td>
<td>A-53</td>
</tr>
<tr>
<td>Outstanding Indebtedness</td>
<td>A-53</td>
</tr>
<tr>
<td>INSURANCE</td>
<td>A-58</td>
</tr>
<tr>
<td>LEGAL PROCEEDINGS</td>
<td>A-58</td>
</tr>
<tr>
<td>Environmental Litigation</td>
<td>A-58</td>
</tr>
<tr>
<td>Claim for Accidental Death</td>
<td>A-59</td>
</tr>
<tr>
<td>Proposition 26 Lawsuit</td>
<td>A-59</td>
</tr>
<tr>
<td>Other Litigation Matters</td>
<td>A-59</td>
</tr>
<tr>
<td>FERC Administrative Proceedings</td>
<td>A-59</td>
</tr>
<tr>
<td>CPUC Administrative Proceedings</td>
<td>A-60</td>
</tr>
<tr>
<td>DEVELOPMENTS IN THE ENERGY MARKETS</td>
<td>A-61</td>
</tr>
<tr>
<td>Background; Electric Market Deregulation</td>
<td>A-61</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>A-61</td>
</tr>
<tr>
<td>Federal Legislation and Regulatory Proceedings</td>
<td>A-62</td>
</tr>
<tr>
<td>State Legislation and Regulatory Proceedings</td>
<td>A-65</td>
</tr>
<tr>
<td>Future Regulation</td>
<td>A-72</td>
</tr>
<tr>
<td>OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY</td>
<td>A-73</td>
</tr>
<tr>
<td>CAISO Market Initiatives</td>
<td>A-73</td>
</tr>
<tr>
<td>Resource Adequacy Filing</td>
<td>A-73</td>
</tr>
<tr>
<td>Energy Imbalance Market</td>
<td>A-73</td>
</tr>
<tr>
<td>Community Choice Aggregation</td>
<td>A-74</td>
</tr>
<tr>
<td>PG&amp;E Bankruptcy</td>
<td>A-75</td>
</tr>
<tr>
<td>Other Factors</td>
<td>A-75</td>
</tr>
</tbody>
</table>
SACRAMENTO MUNICIPAL UTILITY DISTRICT
Sacramento, California

BOARD OF DIRECTORS

Brandon Rose, President
Heidi Sanborn, Vice President
Nancy Bui-Thompson
Gregg Fishman
Rosanna Herber
Rob Kerth
Dave Tamayo

OFFICERS AND EXECUTIVES

Paul Lau, Chief Executive Officer and General Manager
Brandy Bolden, Chief Customer Officer
Suresh Kotha, Chief Information Officer
Jose Bodipo-Memba, Interim Chief Diversity Officer
Scott Martin, Chief Strategy Officer
Laura Lewis, Chief Legal and Government Affairs Officer and General Counsel
Frankie McDermott, Chief Operating Officer
Lora Anguay, Chief Zero Carbon Officer
Jennifer Davidson, Chief Financial Officer
Farres Everly, Director, Communications, Marketing & Community Relations
Russell Mills, Treasurer
Lisa Limcaco, Controller

1 The previous Chief Diversity Officer, Gary King, retired as of March 31, 2022. The Chief Diversity Officer position is currently being filled on a rotational interim basis. See “INTRODUCTION – Independent Governance – Chief Diversity Officer.”
INTRODUCTION

General

The Sacramento Municipal Utility District (“SMUD”) owns and operates an electric system that has provided retail electric service since 1946. SMUD’s current service area is approximately 900 square miles, and includes the principal parts of Sacramento County and small portions of Placer and Yolo counties. See “THE SERVICE AREA AND ELECTRIC SYSTEM – The Service Area.”

Independent Governance

SMUD is an independently run community-owned organization. SMUD is not required by law to transfer any portion of its collections from customers to any local government.

SMUD is governed by a Board of Directors (the “Board”), which consists of seven directors elected by ward for staggered four-year terms. The Board determines policy and appoints the Chief Executive Officer and General Manager, who is responsible for SMUD’s overall management and day-to-day operations. The Chief Executive Officer and General Manager is responsible for the hiring and removal of all employees, other than the Chief Legal Officer and General Counsel, the Internal Auditor and the Special Assistant to the Board, who are hired and may be removed only by the Board. The employment status of nearly all SMUD employees is governed by a civil service system administered by the Chief Executive Officer and General Manager.

The Board elects its President and Vice President annually to take office in January. The current members of the Board are as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Term Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brandon Rose, President</td>
<td>Air Pollution Specialist, California Environmental Protection Agency</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Heidi Sanborn, Vice President</td>
<td>Executive Director, National Stewardship Action Council</td>
<td>December 31, 2022</td>
</tr>
<tr>
<td>Nancy Bui-Thompson</td>
<td>Chief Information Officer, Wellspace Health</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Gregg Fishman</td>
<td>Communications Specialist</td>
<td>December 31, 2022</td>
</tr>
<tr>
<td>Rosanna Herber</td>
<td>Retired Utility Director</td>
<td>December 31, 2022</td>
</tr>
<tr>
<td>Rob Kerth</td>
<td>Business Owner</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Dave Tamayo</td>
<td>Environmental Specialist IV, County of Sacramento</td>
<td>December 31, 2022</td>
</tr>
</tbody>
</table>

SMUD’s senior management consists of the following executives:

**Chief Executive Officer & General Manager.** Paul Lau was named chief executive officer and general manager (“CEO & GM”) of SMUD in October 2020. He reports to the SMUD Board of Directors. As CEO & GM, he leads the sixth largest community-owned electric utility in the nation, serving a population of approximately 1.5 million residents and managing a $1.7 billion budget. Mr. Lau previously served as SMUD’s Chief Grid Strategy & Operations Officer and has held several other executive leadership positions during his 40-year career at SMUD. He serves on several national and local boards, including the Large Public Power Council, California Municipal Utilities Association, American Public Power Association, and Smart Electric Power Alliance, and as a Commissioner of the Balancing Authority.
of Northern California ("BANC"). A registered professional electrical engineer in the State of California (the “State”), Mr. Lau received his bachelor’s degree in electrical power engineering from California State University, Sacramento.

Chief Customer Officer. Brandy Bolden reports to the CEO & GM and oversees SMUD’s Customer and Community Services business unit. She is responsible for customer experience delivery across our residential and commercial customer segments. She provides leadership and oversight of customer operations including customer care and revenue management, business intelligence, strategic account management, customer experience and segmentation strategy, channel management, customer program and service delivery, and special assistance. She is also responsible for commercial development and business attraction and oversees Community Energy Services, which provides services and support for community choice aggregators. Since joining SMUD in 2003, Brandy has demonstrated strong leadership and held a variety of senior leadership roles, including leading the Customer & Community Services project management office and the dual role of director of Customer Care and Revenue Operations. Ms. Bolden led the team responsible for implementing time-of-day rates, streamlining the meter-to-cash processes, delivering key billing and payment experience enhancements and recognizing operational efficiencies that resulted in sustained annual savings for SMUD. Ms. Bolden holds a bachelor’s degree in Sociology from University of California, Davis.

Chief Information Officer. Suresh Kotha reports to the CEO & GM and is responsible for SMUD’s information technology strategy, operations, infrastructure, IT Project Management Office, enterprise innovation process, and cybersecurity. More recently, Mr. Kotha has been leading many technology efforts that are integral to developing a grid of the future that will help us achieve our zero carbon goal, including our Advanced Distribution Management System, the software platform that supports the full suite of distribution management and optimization, and next-generation network upgrades. Mr. Kotha joined SMUD in 2002 as a principal technical developer, with responsibility for designing and leading implementation and upgrades of multiple technology systems, including the SAP software platform and our meter-to-cash systems. He holds a Master’s of Technology in Computer Science from Jawaharlal Nehru Technology University and a Bachelor of Engineering in Electronics & Communications Engineering from Gulbarga University.

Chief Diversity Officer. The Chief Diversity Officer reports to the CEO & GM and is responsible for human resources, workforce diversity and inclusion and SMUD’s Sustainable Communities program. The previous Chief Diversity Officer, Gary King, retired as of March 31, 2022. The Chief Diversity Officer position is currently being filled on a rotational interim basis. The three current Workforce, Diversity & Inclusion Directors will each serve in the role for a 3-month period, starting with Jose Bodipo-Memba. Jose started in this new role on April 2, 2022. He will be followed by Laurie Rodriguez beginning on July 2, 2022, and Markisha Webster beginning on Oct. 1, 2022, following which the position will be filled from among the three directors.

Chief Strategy Officer. Scott Martin reports to the CEO & GM and is responsible for looking holistically at all strategies across the company and driving prioritization including zero carbon, rates and pricing, enterprise strategic planning and enterprise prioritization. Mr. Martin is a seasoned executive with more than 30 years of experience. Prior to assuming this role, Mr. Martin was a director for resource planning and new business strategy. Previous experience also includes customer strategy planning supervisor. Mr. Martin joined SMUD in 1999 and holds a bachelor of arts degree in economics from the University of California, Berkeley and a master of arts degree in economics from the University of Nevada, Las Vegas.

Chief Legal & Government Affairs Officer and General Counsel. Laura Lewis was named general counsel for SMUD in April 2014. In this position she serves as chief lawyer and manages SMUD’s
legal office and its staff of eight attorneys. She also serves as the secretary to SMUD’s elected board of directors. She reports to the Board and to the CEO & GM and has responsibility for all legal matters in which SMUD is a party to, or has an interest in. Ms. Lewis also oversees SMUD’s government affairs and reliability compliance department. In this capacity, she is responsible for management and coordination of all legislative matters and regulatory requirements affecting SMUD at the state and federal level, including the FERC-NERC electric reliability standards. Ms. Lewis joined SMUD in 1997 as a staff attorney, serving in that capacity through 1999, after which she moved to the San Francisco law firm Davis Wright Tremaine. In 2002, she returned to SMUD as a senior attorney. In 2010, she became assistant general counsel and in 2013 was appointed chief assistant general counsel. She holds a juris doctorate from McGeorge School of Law, where she won membership in the Order of the Coif honor society. She holds a bachelor’s degree in political science from the University of California, San Diego and is a member of the American Bar Association, the Energy Bar Association, and the State Bar of California.

Chief Operating Officer. Frankie McDermott reports to the CEO & GM and is responsible for providing strategic leadership and tactical oversight related to the safe and reliable transmission and delivery of energy to customers, ensuring efficient planning, construction, operation and maintenance of transmission, and distribution facilities requirements in order to safely and efficiently meet customer demands. This position has primary responsibility for the processes and functions related to system reliability and operations across SMUD. The Chief Operating Officer is also the safety leader for the enterprise, leader of operational efficiency and responsible for all non-IT capital investments. Prior to this role, Mr. McDermott served as Chief Energy Delivery Officer and Chief Customer Officer, responsible for SMUD’s overall retail strategy. From 2010 to 2014, he served as customer services director, which included managing relationships with customer segments as SMUD moved forward with smart-grid technologies. Prior to that, he served as manager of enterprise performance and held positions in supply chain and in general services. Before joining SMUD in 2003, Mr. McDermott served in management roles in the semiconductor industry at NEC Electronics in Roseville, California and in Ireland. After engineering school in Ireland, he earned an MBA from Golden Gate University and completed the Advanced Management Program at the Haas School of Business at the University of California Berkeley.

Chief Zero Carbon Officer. Lora Anguay reports to the CEO & GM and is responsible for leadership oversight of SMUD’s Energy Supply which includes Energy Trading and Contracts and SMUD’s Power Generation Assets. This role is also responsible for the delivery of SMUD’s plan to provide 100% carbon free energy resources by 2030. This includes obtaining new grants and partnerships, overseeing research and development, designing distributed energy resource programs, enabling processes to settle distributed energy transactions with SMUD’s customers and transitioning SMUD’s power generation assets and energy contracts to zero carbon resources. Prior to assuming this role, Ms. Anguay was the director of Distribution Operations & Maintenance and was responsible for the day to day operations of SMUD’s electric distribution grid. Before that she was an engineering designer, process control supervisor, project manager for smart meter deployment, a senior project manager for smart grid distribution automation and supervisor in Grid Assets. Before SMUD, she worked for Oracle Corporation as a finance manager and is a veteran who served in the United States Coast Guard. Ms. Anguay joined SMUD in 2004 and holds a Bachelor of Science degree in business administration from California State University, Sacramento.

Chief Financial Officer. Jennifer Davidson was named chief financial officer (“CFO”) in 2017. Reporting to the CEO & GM, she oversees corporate accounting, treasury operations and risk management, and planning and budget functions and is also responsible for key corporate services, including facilities, security, image production and postal service, purchasing, warehouse and fleet. Ms. Davidson joined SMUD in 2006 and previously served as director of budget, enterprise performance and risk management. Before joining SMUD, Ms. Davidson held management positions with investor-owned utility Southern
California Edison and software and services provider Amdocs. She holds a bachelor’s degree in geography from the University of California, Los Angeles.

**Director, Communications, Marketing & Community Relations.** Farres Everly reports to the CEO & GM and since 2009 has been responsible for oversight of the SMUD brand, all external and internal strategic marketing and communications activities and campaigns and SMUD’s outreach efforts to the community and the State’s capital region, including volunteerism, events and sponsorships. He previously served as SMUD’s Manager of Advertising and Promotions. Prior to joining SMUD, Mr. Everly held marketing leadership positions at VSP Vision Care, The Money Store and the Sacramento Metropolitan Chamber of Commerce. He holds a bachelor’s degree in Journalism from California State University, Chico.

**Treasurer.** Russell Mills reports to the CFO. He oversees all treasury operations, including debt and cash management, banking, financial planning and forecasting, enterprise and commodity risk management, property and casualty insurance, and is responsible for developing and implementing capital borrowing strategies. Mr. Mills also serves as treasurer for the Transmission Agency of Northern California (“TANC”), the Central Valley Financing Authority (“CVFA”), the Sacramento Cogeneration Authority (“SCA”), the Sacramento Municipal Utility District Financing Authority (“SFA”), the Sacramento Power Authority (“SPA”), the Northern California Gas Authority No. 1 (“NCGA”), the Northern California Energy Authority (“NCEA”) and BANC. Before joining SMUD in 2018 as Treasurer, Mr. Mills served as Chief Financial Officer of Southern California Public Power Authority. He also served as the Chief Financial Officer of the Power Supply Program at the California Department of Water Resources. He holds an MBA from Loyola Marymount University, and a bachelor’s degree in economics from Towson University in Baltimore, Maryland. Mr. Mills also holds the Energy Risk Professional (ERP) designation and is a CFA level II candidate.

**Controller.** Lisa Limcaco reports to the CFO and is responsible for accounting and financial reporting at SMUD. Prior to her appointment as controller in 2020, Ms. Limcaco served as an assistant controller, manager of customer value, performance and projects, senior energy commodity specialist and as principal accountant for SMUD’s joint powers authorities. Ms. Limcaco also serves as controller for TANC, CVFA, SCA, SFA, SPA, NCGA, NCEA and BANC. Before joining SMUD in 2010 as a senior accountant, Ms. Limcaco had 12-years’ experience as the Director of Accounting and controller for a food service provider in Sacramento and over 13-years’ experience in public accounting including audit manager at Price Waterhouse LLP. Ms. Limcaco holds a bachelor’s degree in accounting from the University of Hawaii, a Master of Business Administration from Sacramento State University and is a Certified Public Accountant in the State.

**THE SERVICE AREA AND ELECTRIC SYSTEM**

**The Service Area**

SMUD is the primary distributor of electric power within an area of approximately 900 square miles in central California. The service area includes the State Capital, Sacramento, the populous areas principally to the northeast and south of the City of Sacramento (the “City” or “Sacramento”) and the agricultural areas to the north and south. The City is located 85 miles northeast of San Francisco.

SMUD’s electric system supplies power to a population of approximately 1.5 million with a total annual retail load of approximately 10,453 million kilowatt-hours (“kWh”) for the year ended December 31, 2021. As the capital of the nation’s most populous state, Sacramento benefits from the historically stabilizing influence of a large government sector. Sacramento is home to the State government headquarters, the Sacramento County seat, the City government and various special districts that combine
to make government the largest single employment sector in the Sacramento area. Information technology, transportation, education and health services, leisure and hospitality, and construction round out the other major sectors of employment and industry in the area.

SMUD’s annual peak load has averaged 3,001 Megawatts (“MW”) over the last three years, with SMUD’s record peak load of 3,299 MW occurring on July 24, 2006. In 2017, SMUD recorded its second highest peak load of 3,157 MW. In 2021, SMUD’s peak load was 3,019 MW. SMUD reviews its load forecast, at a minimum, on an annual basis.

The Electric System

SMUD owns and operates an integrated electric system that includes generation, transmission and distribution facilities.

SMUD supplies power to its bulk power substations through a 230 kilovolt (“kV”) and 115 kV transmission system. This system transmits power from SMUD’s generation plants and interconnects with Pacific Gas & Electric (“PG&E”) and the Western Area Power Administration (“WAPA”). Power is distributed throughout Sacramento County via a 69 kV sub-transmission system with the exception of the City’s downtown area, which is served from the 115 kV transmission system. The downtown area is served from 115/12 kV and 115/21 kV substations. The distribution system serving the remainder of SMUD’s service territory is comprised of 69/12 kV substations with overhead and underground 12 kV distribution circuits.

BUSINESS STRATEGY

General

SMUD’s Board of Directors has established the following purpose and vision statements: “SMUD’s purpose is to enhance the quality of life for our customers and community by providing reliable and affordable electricity, and leading the transition to a clean energy future. SMUD’s vision is to be a trusted and powerful partner in achieving an inclusive, zero carbon economy. SMUD will leverage its relationships to accelerate innovation, ensure energy affordability and reliability, protect the environment, eliminate greenhouse gas emissions, catalyze economic and workforce development, promote environmental justice, and enhance community vitality for all.” The Board has adopted a set of Strategic Directions with related metrics, which it considers essential for the success of SMUD and for serving SMUD’s customers. These include competitive rates, access to credit markets, reliability, customer relations, environmental leadership, resource planning, enterprise risk management and safety. Some of the general elements in SMUD’s business strategy are:

- developing and maintaining a sustainable and reliable power supply to meet demand growth consistent with State mandates and the Board’s directions for renewable energy and the reduction of carbon emissions to zero by 2030. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan”;

- working closely with customers to provide the information, tools and incentives to assist them to more efficiently manage energy use, which will contribute to meeting greenhouse gas (“GHG”) emission targets and managing needle peak demand requirements (those 40 or so hours of the year with extreme temperatures when customer demand surges by up to 400 additional MW);

- managing price, volumetric and credit risks associated with energy and natural gas procurement;
• attracting, developing and retaining a diverse, skilled and engaged workforce that reflects SMUD’s values and is committed to achieving SMUD’s mission;
• retaining local decision making authority and operational independence; and
• collaborating regionally to attract new businesses and grow existing business to diversify and strengthen the Sacramento economy.

SMUD’s long-range business strategy focuses in part on ensuring financial stability by establishing rates that provide an acceptable fixed charge coverage ratio on a consolidated basis, taking into consideration the impact of capital expenditures and other factors on cash flow. SMUD’s Board policy sets a minimum fixed charge coverage ratio of 1.50 times for annual budgets, though it generally plans to meet a minimum fixed charge coverage ratio of 1.70 times. Over the past ten years, the actual fixed charge coverage ratio has averaged 2.14 times on a consolidated basis. SMUD also manages its liquidity position by planning for a minimum of 150 days cash on hand and planning to maintain at least $150 million of available capacity under its commercial paper and line of credit program. As of June 1, 2022, SMUD had all $400 million of the authorized principal amount of its commercial paper and line of credit program available for use. SMUD uses cash on hand and commercial paper and a line of credit to fund capital expenditures, then issues debt to reimburse itself for cash expended for qualified capital expenditures or to pay down the outstanding principal amount of its commercial paper program and line of credit. Over the past ten years, the days cash on hand has averaged 218. The resolutions securing SMUD’s Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below) do not require SMUD to maintain a minimum fixed charge coverage ratio, minimum days cash on hand or minimum available capacity under its commercial paper program and line of credit.

In addition, SMUD’s business strategy focuses on servicing its customers in a progressive, forward-looking manner, addressing current regulatory and legislative issues and potential competitive forces.

Serving SMUD’s Customers

SMUD continually looks for ways to better serve and partner with its customers to further strengthen customer loyalty, while providing reasonable product pricing. SMUD also has a focused effort to assist and incentivize customers to more efficiently manage energy use, which will contribute to meeting GHG emission targets and managing peak demand requirements as noted below.

**Digital Enhancements.** Customers are increasingly turning to digital channels such as the new SMUD application, SMUD website, e-mail and social media to interact and do business with SMUD. SMUD has delivered many digital enhancements, including bill pay functionality; online payment arrangements; start/stop/transfer move service; view of energy usage, chat, an enhanced outage map; and the SMUD Energy Store, which is an online marketplace for energy-related products. SMUD plans to continue efforts to provide more personalized digital customer experiences.

**Advanced Metering, Infrastructure and Rate Design.** As a community-owned organization, SMUD is dedicated to providing the tools and transparency in customer energy usage to enable customers to easily and positively affect energy usage, energy cost, and climate change. In 2012 SMUD installed smart technology, including 617,000 digital communicating smart meters, distribution automation systems and equipment to facilitate load management. The advanced technology has allowed SMUD to deliver tools such as text and e-mail bill alerts and online energy usage comparison charts to help customers manage energy use. SMUD has leveraged smart grid investments to improve reliability, reduce losses, reduce power quality issues and improve customer service through better, more timely information, particularly related to outages.
**Time-of-Day Rates.** On June 15, 2017, the Board approved time-of-day ("TOD") rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018 and was completed in the fourth quarter of 2019. Currently, about 98% of residential customers are on TOD rates.

All of SMUD’s business customers are also on time-based rates. On June 24, 2019, the Board approved an update to the commercial TOD rates to improve consistency and better align commercial rates with current energy market prices. Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board postponed the implementation of the commercial rate restructure for one year. The transition was completed in the first quarter of 2022. See “RATES AND CUSTOMER BASE – Rates and Charges.”

**Renewable Options.** SMUD’s customers have been increasingly interested in distributed energy resources, mainly through the installation of solar systems. In 2007, SMUD received 39 applications for customer-owned solar connections. As of January, 2022, approximately 40,400 of SMUD’s residential and commercial customers, approximately 6% of retail customers, had installed solar systems, representing approximately 280 MW of solar installations.

As the cost of energy storage continues to decline, SMUD anticipates an increase in behind-the-meter energy storage, mainly through the installation of battery storage systems. As of January 2022, approximately 611 of SMUD’s residential and commercial customers, approximately 0.01% of retail customers, had installed storage systems, representing approximately 4.4 MW of storage.

As another option for solar, SMUD’s SolarShares® ("SolarShares") pilot program is a cost-effective and convenient way for commercial customers to meet their energy needs from solar power. The SolarShares program offers SMUD commercial customers the opportunity to receive solar power without upfront costs or equipment installation through 5, 10 or 20 year purchase contracts. These customers can receive up to half of their power from a utility-scale solar system. SMUD supplies solar power for the SolarShares program either by building and maintaining utility-scale solar systems or by procuring solar power from third parties through power purchase agreements. The SolarShares generation was approximately 3.0% of retail sales in 2021. As of April 30, 2021, SMUD had completed the SolarShares pilot program and is not entering into new SolarShares contracts.

Since January 2020, the California Building Code has required all newly constructed residential buildings under three stories to be powered by photovoltaic solar systems. A new home satisfies this requirement if it installs on-site solar or participates in an approved community solar or energy storage program. In February 2020, SMUD obtained approval from the California Energy Commission ("CEC") to administer its own community solar program, called Neighborhood SolarShares® ("Neighborhood SolarShares"). SMUD’s Neighborhood SolarShares program can be used by developers of new low-rise residential buildings to satisfy the mandatory solar requirement. See also “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Rooftop Solar Mandate.” Starting in 2023, the California Building Code’s mandatory solar requirement will extend beyond low-rise residential properties, and other changes to the California Building Code’s community solar regulations will take effect. SMUD will revise its program to align with the new regulations and seek approval from the CEC to continue offering its Neighborhood SolarShares compliance option to newly constructed low rise residential homes in its service territory.

In addition to SolarShares and Neighborhood SolarShares, SMUD maintains a voluntary green energy pricing program called Greenergy® ("Greenergy"). The Greenergy program allows customers the opportunity to pay an additional amount per month to ensure that either all or part of their electricity comes...
from green energy sources. In 2021, the program allocated Renewable Energy Credits ("RECs") equivalent to approximately 6% of retail sales to its participating customers.

Energy Efficiency. To further assist customers in managing energy usage and reducing regional carbon emissions and air pollution, SMUD offers an extensive array of energy efficiency and building electrification programs and services including financial incentives, loans, energy audits and education. In addition, SMUD has partnered with local developers to incorporate energy efficiency and all-electric construction measures into new residential and commercial construction, which helps developers plan and design efficient, cost-effective and low or zero-emission buildings. As part of SMUD’s 2019 Integrated Resource Plan ("IRP"), SMUD set a goal for regional carbon emissions through transport and building electrification that aims to reduce carbon emissions in buildings and transport by 64% over the next 20 years. SMUD’s focus on electrification is continued in the Zero Carbon Plan (defined and discussed below). SMUD was the first electric utility in the country to set its efficiency goals based on carbon reductions, allowing building electrification and energy efficiency to both count toward meeting SMUD’s efficiency goals. This is a significant opportunity, as converting a typical home today to all-electric saves more than three times the carbon emissions compared to doing a major energy efficiency upgrade alone to the same building. See “POWER SUPPLY AND TRANSMISSION – Projected Resources.”

Sustainable Power Supply and Transmission

Maintaining a sustainable power supply entails focusing efforts on researching, promoting and implementing new renewable energy technologies and sources to meet SMUD’s long-term commitment to reducing carbon emissions and providing a reliable energy supply. SMUD defines a sustainable power supply as one that reduces SMUD’s GHG emissions to serve retail customer load to zero by 2030. See “2030 Zero Carbon Plan” below. SMUD is planning to achieve zero GHG emissions to serve retail customer load through investments in energy efficiency, clean distributed energy resources, renewables portfolio standard ("RPS") eligible renewables, energy storage, large hydroelectric generation, clean and emissions free fuels, and new technologies and business models. Additionally, SMUD plans to continue pursuing GHG emissions reductions through vehicle, building and equipment electrification. At the same time, SMUD’s plans for maintaining a sustainable power supply include assuring the reliability of SMUD’s electric system, minimizing environmental impacts on land, habitat, water and air quality, and maintaining competitive rates relative to other electricity providers in the State.

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills regulate GHG emissions and encourage greater investment in energy efficiency and sustainable generation alternatives, principally through more stringent RPS. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings” herein.

2030 Zero Carbon Plan. In July 2020, the Board declared a climate emergency and adopted a resolution calling for SMUD to take significant and consequential actions to reduce its carbon footprint by 2030. On April 28, 2021, the Board approved SMUD’s 2030 Zero Carbon Plan (the “Zero Carbon Plan”). The Zero Carbon Plan is intended to be a flexible roadmap for SMUD to eliminate carbon emissions from its electricity production by 2030 while maintaining reliable and affordable service. To achieve these goals the Zero Carbon Plan is focused on four main areas: natural gas generation repurposing, proven clean technologies, new technologies and business models and financial impacts and options. SMUD plans to visit the Zero Carbon Plan annually.

The natural gas generation repurposing focus of the Zero Carbon Plan calls for exploring the retirement of two of SMUD’s five Local Gas-Fired Plants (as defined herein) and the retooling of the other three Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants.” Based on SMUD’s studies to date, SMUD estimates that SPA
McClellan (as defined herein) can be retired by 2024 and that the SPA Project (as defined herein) can be retired by 2025. Final decisions about the retirement of these two Local Gas-Fired Plants will be based on additional reliability studies and engagement with the community. As part of the Zero Carbon Plan, SMUD is also exploring converting the CVFA Project (as defined herein) and the SCA Project (as defined herein) to standby operations only and investigating the use of alternative fuels like Renewable Natural Gas-biomethane (RNG-biomethane), hydrogen and other biofuels for the CVFA Project, SCA Project, and SFA Project (as defined herein). In addition, SMUD is investigating long duration energy storage strategies for the SFA Project. All final generator configurations are subject to reliability assessments.

The proven clean technologies focus of the Zero Carbon Plan calls for SMUD to procure approximately 1,100 to 1,500 MW of local utility-scale solar photovoltaic (“PV”) generating capacity, 700 to 1,100 MW of local utility-scale battery storage, 300 to 500 MW of wind generating capacity, 100 to 220 MW of geothermal generating capacity, and 100 MW of regional utility-scale solar PV generating capacity. The Zero Carbon Plan also estimates that customer installation of approximately 500 to 750 MW of behind-the-meter solar PV generating capacity and approximately 50 to 250 MW of behind-the-meter battery storage will assist SMUD with achieving the Zero Carbon Plan goals.

With respect to new technologies and business models, the Zero Carbon Plan focuses on evaluating, prioritizing and scaling the emerging technologies that SMUD expects will have the largest impact on reducing carbon in SMUD’s 2030 resource mix. SMUD is currently focused on four main areas of technology: electrification, education and demand flexibility, virtual power plants and vehicle-to-grid technology, and new grid-scale technologies. The Zero Carbon Plan forecasts that customer-owned resources and SMUD customer-focused programs will contribute between 360 and 1,300 MW of capacity to SMUD’s grid by 2030.

The financial impacts and options focus of the Zero Carbon Plan aims to keep SMUD rate increases at or below the rate of inflation while achieving SMUD’s goal of eliminating carbon emissions from its power supply by 2030. To pay for the expected costs of the Zero Carbon Plan and keep rate increases at or below the rate of inflation, the Zero Carbon Plan estimates the need for SMUD to realize between $50 million and $150 million of sustained annual savings. SMUD currently plans to achieve these sustained annual savings by exploring the implementation of operational savings strategies and pursuing partnership and grant opportunities.

While the ultimate impacts of the Zero Carbon Plan on SMUD’s financial results and operations are difficult to predict and are dependent on a variety of factors, such as the relative cost of procuring energy from clean technologies, the availability and relative cost of new technologies, and the adoption and implementation of energy efficiency and other measures by SMUD’s customers, such impacts could be material.

Renewable Energy and Climate Change. The California Renewable Energy Resources Act, established by Senate Bill X1-2 (“SBX1-2”) and the Clean Energy and Pollution Reduction Act of 2015, enacted by Senate Bill 350 (“SB 350”) require that SMUD meets 33% of its retail sales from RPS-eligible renewable resources by 2020 and 50% of its retail sales from RPS-eligible renewable resources by 2030. Senate Bill 100 (“SB 100”), passed by the legislature and approved by then-Governor Brown on September 10, 2018, accelerates the RPS targets and establishes a new 60% target by 2030. The bill also creates a planning goal to meet all of the State’s retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Renewables Portfolio Standards” for a discussion of the State RPS requirements.
SMUD’s compliance with State RPS requirements is evaluated over 3 or 4-year compliance periods. SMUD met the State RPS requirements for the first compliance period (2011-2013) and second compliance period (2014-2016). The third compliance period (2017-2020) required SMUD to source one-third of its energy from renewable resources, and SMUD had sufficient RECs to meet the third compliance period requirements. SMUD filed its 2020 and third compliance period RPS compliance report with the CEC in the second quarter of 2021 and is awaiting verification of its submission from the CEC which is expected to occur by the end of 2022. As of the end of the third compliance period (2020), SMUD had approximately 1.0 million surplus RECs available to help meet future RPS targets. SMUD expects to file its 2021 RPS compliance report by July 1, 2022, and has sufficient resources purchased in 2021 and surplus RECs to meet the 2021 RPS target (35.75%). In addition to meeting RPS standards, SMUD serves an additional 9% of its customer load with renewable energy through its voluntary SolarShares and Greenergy pricing programs. SMUD estimates that it has sufficient renewable energy deliveries, new power supply contract commitments, new power supply commitments under active discussion, and RPS-eligible surplus carryover to meet its RPS requirements through 2025. Additional solicitations currently under way are expected to provide sufficient RPS-eligible resources to cover SMUD’s RPS requirements through 2028. The resources needed to meet SMUD’s 2030 Zero Carbon Plan goals are expected to cover SMUD’s RPS obligations through at least 2030. The following chart illustrates SMUD’s current RPS requirements through 2030 and its existing and committed resources, and its resources under active discussion that are expected to be utilized to meet those requirements.

In addition to procuring new sources, meeting the RPS requirements will require replacement of certain existing renewable contracts which expire in future years. While SMUD anticipates it will meet much of its renewable resource requirements through purchase contracts with third parties, it continues to
explore additional options, including wind, solar, biomass, and geothermal developments, partnering with other utilities on future projects, and local development options. SMUD’s resource forecast (see “POWER SUPPLY AND TRANSMISSION – Projected Resources”) accounts for future renewable resources as a component of “Uncommitted Purchases.” To meet SMUD’s Zero Carbon Plan goals, SMUD anticipates meeting loads in 2030 with approximately 70-80% renewable resources, in addition to hydro and other new zero carbon technologies. See “2030 Zero Carbon Plan” above.

Given the intermittent nature of power from renewable resources such as wind and solar, SMUD is exploring and investing in options that provide the flexibility to manage the intermittency of such renewable resources. Potential options include energy storage resources, which SMUD has committed to as part of the 2030 Zero Carbon Plan, and expanding load management resources. Additionally, on April 3, 2019, SMUD, through its membership in BANC, a joint exercise of powers agency formed in 2009, and currently comprised of SMUD, the Modesto Irrigation District (“MID”), the City of Roseville (“Roseville”), the City of Redding (“Redding”), the City of Shasta Lake and the Trinity Public Utilities District has commenced its participation in the California Independent System Operator Corporation (“CAISO”) energy imbalance market (“EIM”). Participation in the EIM benefits SMUD by providing it with broader access to balancing resources within the region to help manage its expanding renewable portfolio. In addition, other entities within the BANC Balancing Authority Area began participation in the EIM on March 25, 2021. See “BUSINESS STRATEGY – Serving SMUD’s Customers – Operational Independence and Local Control” and “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

In 2018, SMUD’s Board adopted a new IRP through a comprehensive public process and filed the approved IRP with the CEC on April 29, 2019 pursuant to the CEC’s IRP guidelines. The approved IRP calls for a reduction in GHG emissions from SMUD’s energy supply by more than 60% by 2030 relative to 1990 levels and a goal of net zero emissions by 2040 due, in part, to a significant investment in electrification of the local building and transportation sectors. The IRP was expected to reduce Sacramento’s economy-wide GHG emissions by 70% relative to current levels. SMUD’s Zero Carbon Plan, adopted in 2021, built upon the 2018 IRP and set a goal of zero carbon emissions by 2030. SMUD is currently working to update its IRP filing with the CEC to incorporate the updated goals set in the 2030 Zero Carbon Plan pursuant to the CEC’s IRP guidelines. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

The State’s carbon cap-and-trade market established pursuant to Assembly Bill 32 (“AB 32”) began in 2013. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Greenhouse Gas Emissions” for a discussion of AB 32 and the State’s cap-and-trade program. SMUD anticipates that allowances allocated to SMUD will nearly equal SMUD’s compliance obligations under normal water year conditions. Under low water year conditions, SMUD may need to purchase additional allowances to cover its compliance obligations, including carbon obligations related to wholesale energy sales from SMUD’s natural gas power plants. As SMUD implements its clean power goals, SMUD expects its need for these allowances to decline.

There is scientific consensus that increasing concentrations of GHG have caused and will continue to cause a rise in temperatures in the State and around the world. The change in the earth’s average atmospheric temperature, generally referred to as “climate change,” is, among other things, expected to result in a wide range of changes in climate patterns, including increases in the frequency and severity of extreme weather events, including droughts and heat waves, more frequent incidences of wildfires, changes in wind patterns, sea level rise and flooding, any of which alone or in combination could materially adversely affect SMUD’s financial results or operations. See also “FACTORS AFFECTING THE REGION” and “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Other Factors.”

As described above, SMUD is actively working to meet its sustainable power supply goals,
reduce its own GHG emissions, and assist the local governments in the territory it serves with their desired GHG reductions. In 2016, SMUD introduced the Pilot Natural Refrigerant Incentive Program, its first customer program providing incentives for GHG reduction in addition to kWh savings. SMUD is a founding member and active participant in the Capital Region Climate Readiness Collaborative, a public private partnership formed to better understand and plan for climate impacts expected in the region. SMUD is also an active member of the United States Department of Energy (the “DOE”) Partnership for Energy Sector Climate Resilience. SMUD regularly reviews scientific findings related to climate change and in 2016 published its Climate Readiness Assessment and Action Plan.

**Energy Storage Systems.** Assembly Bill 2514 (“AB 2514”) requires the Board to re-evaluate energy storage goals every three years. In compliance with AB 2514, the Board established a target of 9 MW of energy storage procurement by December 31, 2020, which SMUD has procured. See “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Energy Storage Systems” for further discussion of AB 2514. In September 2020, the Board directed that energy storage forecasts be implemented through SMUD’s IRP process going forward. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Renewable Energy and Climate Change” above for a discussion of SMUD’s IRP. SMUD is also evaluating how to couple utility-scale solar with utility-scale storage to support future system reliability needs and renewable energy goals.

**Meeting Peak Load.** A significant consideration for SMUD will be how it addresses its system peak load. SMUD has implemented programs and tools, such as advanced metering, energy efficiency options, and TOD rates for residential customers, to help customers manage their costs while helping SMUD reduce its peak load. Analysis of 2021 data showed a reduction of approximately 125 MW, not weather adjusted, for residential customers during the TOD peak period (5-8 p.m. local time). SMUD staff will continue to monitor the progress and results of the implementation of TOD rates and will use this information to inform future rate actions and load forecasts. See “BUSINESS STRATEGY – Serving SMUD’s Customers – Time-of-Day Rates.”

On September 16, 2021, the Board approved an optional residential Critical Peak Pricing rate (the “Peak Pricing Rate”), which will go into effect June 1, 2022. The Peak Pricing Rate is designed to reduce load by increasing the price of energy when the grid is most impacted, up to 50 hours per summer. In exchange, customers on the rate will receive a per kWh discount on summer Off-Peak and Mid-Peak rates. SMUD is also exploring the use of more distributed energy resources and demand response programs that could further reduce SMUD’s system peak.

**Operational Independence and Local Control.** A key component of SMUD’s business strategy is focused on maintaining its independence in operating and maintaining its resources. As such, SMUD has taken a number of actions to mitigate the potential impacts of various federal and state regulatory actions. For example, in 2002 SMUD established itself as an independent control area (now termed “Balancing Authority”) within the Western Electricity Coordinating Council (“WECC”) region. By removing itself from CAISO’s Balancing Authority area, SMUD became responsible for balancing electric supply and demand within its own service territory. This move substantially reduced fees paid to CAISO, preserved operational flexibility and helped to insulate SMUD from the uncertain regulatory environment and tariff structure of CAISO. In addition to decreased financial risks, this independence also reduced SMUD’s exposure to the impacts of capacity and energy shortages in the CAISO Balancing Authority area. Further, as an independent Balancing Authority, SMUD continued to support the statewide electric grid in events of electrical emergencies requiring rotating outages, such as loss of major transmission lines or equipment, as provided in the statewide emergency plan. By 2006, the SMUD Balancing Authority footprint expanded north to the California-Oregon border and south to Modesto, to include the service areas of the WAPA, MID, Redding and Roseville, and TANC -owned 340-mile 500-kV California-Oregon Transmission Project ("COTP"). In October 2009, SMUD, with the coordination and cooperation of WAPA, joined the
Northwest Power Pool Reserve Sharing Group, which supports reliability and reduces operating costs. In May 2011, BANC assumed the role of the Balancing Authority, though SMUD continues to oversee operation of the grid on behalf of BANC. BANC members share cost responsibility for balancing authority-related compliance obligations, liabilities, and operations. BANC also serves as an important venue for SMUD and other BANC members to collaborate with respect to operational and market improvements inside the BANC footprint and to preserve their operational independence. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.” On April 3, 2019, SMUD, through its participation in BANC, began operating in the CAISO EIM, which will help SMUD better manage the integration of renewable energy resources. The CAISO EIM is a voluntary market, which allows SMUD to maintain its operational independence from the CAISO, while providing SMUD greater access to balancing resources throughout the western region. See “POWER SUPPLY AND TRANSMISSION – Balancing Authority Area Agreements.”

FERC Order 1000. In 2011, the Federal Energy Regulatory Commission (“FERC”) issued Order 1000, which mandates regional transmission planning and imposes a regional cost allocation methodology for transmission facilities. FERC states that it has the authority to allocate costs to beneficiaries of transmission services even in the absence of a contractual relationship between the owner of the transmission facilities and the beneficiary. Despite appeals challenging FERC’s authority on a number of grounds, the D.C. Circuit Court of Appeals upheld Order 1000. See “DEVELOPMENTS IN THE ENERGY MARKETS – Federal Legislation and Regulatory Proceedings – Federal Regulation of Transmission Access.” Nevertheless, there remains flexibility with respect to SMUD’s participation in regional transmission planning. Specifically, SMUD is voluntarily participating as a Coordinating Transmission Owner (“CTO”) in the WestConnect transmission planning organization, and will rely on its WestConnect membership to keep it Order 1000 compliant. While SMUD opposes any cost allocation methodology that would obligate SMUD to pay for facilities that it does not use or need to maintain reliable operations or serve its load, the FERC-approved WestConnect planning process does provide a CTO the option to not accept an allocation of costs. WestConnect is composed of utility companies providing transmission of electricity in a portion of the western United States, working collaboratively to assess stakeholder and market needs and develop cost-effective enhancements to the western wholesale electricity market. SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally.

Electricity, Natural Gas, and Related Hedging

SMUD continues to utilize a comprehensive and integrated power and fuel supply strategy to acquire a reliable and diversified portfolio of resources to meet existing and future needs. This strategy includes a combination of both physical supply and financial hedging transactions to reduce price risk exposure over a five-year horizon. SMUD’s physical supply arrangements include ownership of power generating resources, as well as a diversified portfolio of power and fuel supply purchase contracts that range in duration, with a mixture of fixed and variable pricing terms.

With regard to the power purchase contracts, SMUD has entered into a series of contracts for the purchase of electricity to supply the portion of its resource needs not already provided by owned resources. SMUD also actively manages its exposure on variable rate electricity purchases, and at times may enter into financial contracts to fix prices by using options to reduce price risk, in each case when warranted by economic conditions. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements.”

With regard to fuel supply contracts, SMUD utilizes a similar strategy of employing financial contracts of various durations to hedge its variable rate fuel supply contracts. As of March 31, 2022, these contracts are forecasted to have hedged the price exposure on approximately 68%, 70% and 65% of SMUD’s anticipated natural gas requirements for 2022, 2023 and 2024, respectively. While the financial
effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted. See “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Supply.”

As provided in SMUD’s natural gas contracts, SMUD may be required to post collateral to various counterparties. As of April 15, 2022, SMUD did not have any collateral posting obligations. A decrease in natural gas prices could result in a collateral posting by SMUD. While the posting of collateral is not an expense for SMUD, it does temporarily encumber unrestricted cash balances.

To hedge against hydroelectric production volatility of SMUD-owned hydroelectric facilities, SMUD implemented a pass-through rate component called the Hydro Generation Adjustment (the “HGA”). The HGA and the associated Hydro Rate Stabilization Fund (the “HRSF”) help to offset increased power supply or fuel supply costs in years where precipitation levels at SMUD-owned hydroelectric facilities are low. To hedge against variations in the volume of energy received from non-SMUD-owned hydroelectric resources, SMUD uses a rate stabilization fund to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

Managing Risks

SMUD maintains an Enterprise Risk Management (“ERM”) program, a strategic approach to managing enterprise-wide risks as a portfolio, to help reduce the chance of loss, create greater financial stability and protect SMUD resources. It is designed to maintain an early warning system to monitor changes in, and the emergence of, risks that affect the organization’s business objectives. Under the purview of the Enterprise Risk Oversight Committee, composed of executive members and chaired by the Chief Financial Officer, ERM conducts ongoing risk identification, assessments, monitoring, mitigation, risk-based budgeting and reporting. To ensure accountability and oversight, each identified risk is assigned to an executive-level risk owner. Risk status and mitigation efforts are reported monthly to the Board.

Competitive Challenges

In the coming decade, utilities like SMUD may face competition from companies in other industries looking to diversify into the energy sector. Examples of developing competitive areas include retail sale of electricity, distributed electric storage resources, renewable distributed generation (mostly solar in Sacramento), customer installation of fuel cells, third-party electric vehicle charging, home or business automation that enables greater customer participation in energy markets, and third-party provision of energy management software and solutions.

SMUD has a wide range of initiatives to monitor and adapt to changing market conditions and new industry participants. Key areas of focus include:

- **Enhancing customer experience.** Recognizing the importance of meeting customer expectations, SMUD introduced the Customer Experience Strategy in 2016 to provide customers “value for what they pay” and further strengthen customer loyalty. The initiative is focused on ensuring SMUD has the people, systems, technology, programs and services to consistently meet or exceed customers’ changing expectations. The customer experience is measured via surveys with the goal of achieving and maintaining at least 70% of customers agreeing that SMUD provides them with value for what they pay by 2024.

- **Restructuring electric rates.** In 2017, the Board approved TOD rates as the standard rate for residential customers. The residential rate transition began in the fourth quarter of 2018, and the full transition was completed in the fourth quarter of 2019. All of SMUD’s business customers are also on time-based rates. In 2019, the Board approved a
Restructuring of commercial rates to collect a greater portion of fixed costs through fixed charges and to better align time periods and prices with energy markets. The commercial rate restructuring was delayed by one year due to the impacts of the COVID-19 pandemic. The transition was completed in the first quarter of 2022. See “Rates and Customer Base – Rates and Charges” and “Factors Affecting the Region – Impacts from COVID-19 Pandemic.”

- **Ongoing integrated resource planning.** SMUD monitors and updates its integrated resource planning to ensure future sources of energy balance cost, reliability and environmental requirements with the flexibility to meet challenges of changing market and regulatory conditions, customer energy resources, and emerging technologies.

**Leveraging Core Competencies**

In addition to these initiatives, SMUD is leveraging core competencies to improve industry safety and help communities serve their customers’ energy needs.

**Sacramento Power Academy.** SMUD is leveraging its significant experience in training skilled line-workers with the opening of the SMUD Power Academy regional training center in 2016. The academy currently emphasizes training for public power, customer-owned utility employees. There are currently approximately 2,000 customer-owned utilities in the United States that are similar to SMUD, many of which may not have the resources to adequately train their employees. In addition to line-workers, the center will also train substation and network electricians. Other future plans include training electrical, telecom and meter technicians; engineers and designers; construction management inspectors; equipment operators; cable splicers and locators; and support staff.

**Community Choice Aggregation.** In 2002, Assembly Bill 117 was passed to establish Community Choice Aggregation in the State. SMUD sees the growth of Community Choice Aggregators (“CCAs”) as an opportunity to support organizations with values closely aligned with SMUD’s values, while also generating additional revenue for SMUD. CCA programs are proliferating in the State thanks to support for expanding renewable energy use and desire for local control particularly for electricity procurement. There are numerous CCAs operating in the State, and more are anticipated to launch in the future. CCAs are responsible for procuring wholesale power, setting the generation rate, and staffing a call center to handle opt-outs and questions about the power portfolio. The local investor-owned utility (“IOU”) continues to deliver electricity from the electric grid, maintain its electric infrastructure, bill customers and collect payments.

In October 2017, SMUD was selected by the governing board of Valley Clean Energy (“VCE”) to provide technical, energy and support services, including data management and call center services, wholesale energy services, and business operations support, to VCE for a five-year term. VCE is a joint powers agency formed in 2016 by the City of Woodland, the City of Davis and Yolo County to implement a local CCA program. The service territory expanded to include the City of Winters in 2021. The mission of VCE is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emissions reductions to its customers in Yolo County. VCE began electric services to its customers in the summer of 2018, giving Yolo County residents a choice between two electricity providers, VCE and PG&E.

In November 2017, SMUD was selected by the governing board of East Bay Community Energy (“EBCE”) to provide call center and data management services for a three-year term beginning in January 2018. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to...
implement a local CCA program. EBCE expanded its territory to the cities of Pleasanton, Newark, and Tracy in April 2021. SMUD signed a new contract with EBCE in January 2022 for another three years for call center and data management services.

In June 2019, SMUD was selected by the governing board of Silicon Valley Clean Energy (“SVCE”) to provide program services to help local SVCE communities reduce carbon pollution while delivering engaging customer experiences. SVCE programs are focused on grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

While CCAs have had success in the State, they are susceptible to business, regulatory and other risks that could lead to a financial loss and/or result in a cessation of operations for the CCA. These risks could extend to a CCA’s counterparties, including SMUD. SMUD has made an effort to identify and mitigate potential counterparty risks to the extent possible in service agreements with the CCA’s described above. SMUD may pursue opportunities to provide similar services to additional CCAs in the future. SMUD management does not expect its current arrangements with VCE, EBCE, and SVCE to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

**FACTORS AFFECTING THE REGION**

**Precipitation Variability**

SMUD uses a National Weather Service precipitation station located at Pacific House, California to approximate available water supply to SMUD’s Upper American River Project (the “UARP”) hydropower reservoirs. As of March 31, 2022, precipitation at Pacific House, California totaled 37.14 inches for the October-September hydropower water supply period. This is 89% of the 50-year rolling median of 41.86 inches. Total reservoir storage in the UARP hydropower reservoirs was about 83% of capacity as of April 12, 2022, approximately 15% above historical average for this date. SMUD manages its reservoirs to maximize water storage going into the summer season, which preserves generating capacity during SMUD’s high load months and ensures that SMUD meets its UARP FERC license requirements, including requirements for recreational and environmental flows.

Although reservoir levels in the UARP are above historical averages, there remains the potential for wide swings in precipitation from year to year. In years with below average rainfall, SMUD may have to generate or purchase replacement energy at additional cost. To hedge against variations in the volume of energy received from SMUD-owned UARP hydroelectric resources, SMUD uses the HRSF to help offset increased power supply or fuel supply costs. See “RATES AND CUSTOMER BASE – Rate Stabilization Funds.”

SMUD is also exposed to precipitation variability through its contract with the WAPA. In an average water year this contract provides roughly 661 gigawatt hours (“GWh”) of power, but the actual amount will vary depending on precipitation. Unlike the UARP, SMUD does not monitor precipitation stations to approximate power deliveries under the WAPA contract, and instead relies on a forecast of power deliveries from WAPA. As of March 31, 2022, WAPA has forecasted power deliveries of 348 GWh for 2022. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Western Area Power Administration.”
Wildfires

**General.** Wildfires in the State have become increasingly common and destructive. Frequent drought conditions and unseasonably warm temperatures have increased, and could further increase, the possibility of wildfires occurring in areas where SMUD maintains generation, transmission and distribution facilities. The number of diseased and dead trees has increased, and could further increase, this possibility. As a result, SMUD faces an increased risk that it may be required to pay for wildfire related property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), or may be disputed by insurers, and could be material. In addition, a significant fire or fires in SMUD’s generation, transmission or service area could result in damage or destruction to SMUD’s facilities, result in a temporary or permanent loss of customers or otherwise materially increase SMUD’s costs or materially adversely affect SMUD’s ability to operate its Electric System or generate revenues.

SMUD’s service territory is located within Sacramento County, which is located outside the California Public Utilities Commission (the “CPUC”) high fire threat areas, established in 2018. However, as described below, SMUD’s UARP facilities and certain of SMUD’s and TANC’s transmission facilities are within CPUC high fire threat areas. In addition, as described below, certain portions of SMUD’s service territory are located within the California Department of Forestry and Fire Protection (“Cal Fire”) Fire Protection and Resource Assessment Program (“FRAP”) Moderate, High and Very High Fire Hazard Severity Zones. SMUD’s exposure to liability for damages related to its UARP facilities, which are located within high fire threat areas in El Dorado County, is reduced due to risk mitigation measures adopted by SMUD and the low number of inhabitants and structures near the UARP facilities (See “Wildfire Mitigation” below). SMUD continues to take responsible action to minimize its exposure to liability from wildfires; however, under current State law, utilities can be held liable for damages caused by wildfires sparked by their equipment or other facilities regardless of whether the utility was negligent or otherwise at fault. Therefore, at this time the full extent of SMUD’s potential exposure to wildfire risk is unknown.

**Distribution (SMUD Service Territory).** Portions of SMUD’s service territory are located within Cal Fire’s FRAP Moderate, High and Very High Fire Hazard Severity Zones. State law requires Cal Fire to classify areas in the State based on the severity of the fire hazard that is expected to prevail there. These areas or “Fire Hazard Severity Zones” are based on factors such as fuel (material that can burn), slope and the expected chance of burning. There are three Fire Hazard Severity Zones (Moderate, High and Very High) based on increasing fire hazard. SMUD has assessed its service territory based on Cal Fire’s FRAP map, adopted in 2007; the following table illustrates SMUD’s assessment of the approximate extent of its service territory and retail customer base located within the three Fire Hazard Severity Zones.

<table>
<thead>
<tr>
<th>Fire Hazard Severity Zone</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres of SMUD Service Area</td>
<td>231,816</td>
<td>2,337</td>
<td>1,061</td>
</tr>
<tr>
<td>% of Total SMUD Service Area</td>
<td>40.6%</td>
<td>0.4%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Number of Retail Customers</td>
<td>40,114</td>
<td>3,688</td>
<td>136</td>
</tr>
<tr>
<td>% of Total Retail Customers</td>
<td>6.0%</td>
<td>0.6%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Transmission (Outside of SMUD Service Territory).** In 2018, the CPUC approved a new statewide fire map that identifies areas of elevated and extreme wildfire risk from utility-associated assets located throughout the State. SMUD directly participated in the development of the CPUC’s statewide fire map. In connection with the development of the CPUC’s statewide fire map, a peer review and a team of independent nationwide experts led by Cal Fire affirmed that SMUD’s electric service area is properly
located outside of these elevated (“Tier 2”) and extreme (“Tier 3”) high fire threat areas; however, SMUD’s UARP facilities are located within both Tier 2 and Tier 3 areas. According to the CPUC, Tier 2 fire-threat areas are areas where there is an elevated wildfire risk from utility assets and Tier 3 fire-threat areas are areas where there is an extreme risk from utility assets. As of June 8, 2021, approximately 37 right-of-way mile of SMUD’s transmission lines are in Tier 2 fire-threat areas and approximately 19 right-of-way miles of SMUD’s transmission lines are in Tier 3 fire-threat areas. SMUD is also a member of TANC. As of July, 2021, approximately 116.3 right-of-way miles of TANC’s transmission lines are in Tier 2 fire-threat areas and approximately 4.5 right-of-way miles of TANC’s transmission lines are in Tier 3 fire-threat areas. In accordance with its FERC license, SMUD adheres to a FERC-approved Fire Prevention and Response Plan for its UARP facilities. On May 17, 2018, in accordance with State law, SMUD’s Board of Directors determined that the UARP area may have a “significant risk of catastrophic wildfire” resulting from overhead electric facilities and that SMUD’s FERC-approved UARP Fire Prevention and Response Plan meets requirements for presenting wildfire mitigation measures to the Board for its approval.

Wildfire Mitigation. In response to potential wildfire risk, SMUD is implementing a series of measures intended to prevent wildfires from occurring, minimize the spread of any fire that does occur and improve the resiliency of its system. These measures include an increase in the degree of sophistication of fuel reduction inside and adjacent to rights-of-ways; installation of Cal Fire-approved exempt material to reduce the risk of sparking; enhanced inspection and maintenance programs; increased use of ignition-resistant construction, including covered conductors and undergrounding of conductors; increased monitoring of and identified responses to fire conditions, including operational procedures for the de-energization of lines during high fire conditions; and elimination of the use of automatic circuit reclosers on SMUD’s transmission lines and on SMUD’s distribution lines in certain areas during fire season.

SMUD’s proactive approach to vegetation management recently has been expanded to include the use of advanced technologies such as Light Detection and Ranging surveys, ortho and oblique that is used to pinpoint tree health and/or condition that may not yet be visible to the naked eye. In addition, SMUD has installed additional weather stations in transmission corridors and substations for increased situational awareness, and has continued coordination and collaboration with local agencies and first responders as well as vulnerable populations.

State legislation enacted in 2018 and 2019 requires publicly owned utilities (“POUs”) to prepare and present Wildfire Mitigation Plans to their governing boards by January 1, 2020, and annually thereafter. SMUD assembled an enterprise-wide team of subject-matter experts to prepare its plan in compliance with this legislation, released a draft of the plan for public comment, contracted for and obtained an independent evaluation of the comprehensiveness of the plan, and presented the plan and the evaluator’s report to the Board in the fourth quarter of 2019. The plan was adopted by the Board and submitted to the State Wildfire Safety Advisory Board (the “WSAB”) in 2020.

SMUD reviewed and updated its wildfire mitigation plan, released a draft of the updated wildfire mitigation plan for 2021 (the “2021 Wildfire Mitigation Plan”) for public comment, contracted for and obtained an independent evaluation of the comprehensiveness of the 2021 Wildfire Mitigation Plan, and presented the 2021 Wildfire Mitigation Plan and the evaluator’s report to the Board in the fourth quarter of 2020. Subsequent to this approval the WSAB issued a general set of recommendations for publicly owned electric utility wildfire mitigation plans. SMUD prepared a Supplement to its 2021 Wildfire Mitigation Plan (the “Supplement”) to respond to those recommendations and presented the Supplement to the Board in the second quarter 2021. The Supplement was adopted by the Board and SMUD submitted the 2021 Wildfire Mitigation Plan together with the Supplement to the WSAB in June 2021. The WSAB adopted its 2022 Guidance Advisory Opinion for POUs in February 2022 and SMUD has responded to all recommendations regarding SMUD’s Wildfire Mitigation Plan in the development of its draft Wildfire Mitigation Plan (“2022 Wildfire Mitigation Plan”). After completion of a noticed public comment process and qualified
independent evaluator review, the draft 2022 Wildfire Mitigation Plan will be presented to the Board and once adopted by the Board will be submitted to the WSAB by July 1, 2022. SMUD will continue to annually review and update its wildfire mitigation plan, conducting a comprehensive review at least every third year.

**Wildfire Insurance.** Wildfires in the State have not only increased potential liability for utilities, but have also adversely impacted the insurance markets, leading to higher costs for coverage; coverages becoming prohibitively expensive; limited or restricted coverage to certain types of risks; or coverage at insufficient levels. SMUD most recently renewed its general and wildfire liability insurance coverage on June 15, 2021. SMUD increased the commercially-insured portion of its $250 million wildfire coverage program from $173 million to $176 million and stayed within budgeted premium amounts. SMUD self-insures certain layers and quota share portions of the insurance tower up to $74 million.

In addition, it is expected that SMUD will have a portion of the $400 million aggregate principal amount of its commercial paper and line of credit program to provide operational flexibility in the event of the occurrence of a wildfire or other operational event. However, SMUD has not covenanted to maintain the availability of the commercial paper program and line of credit program for these purposes and no assurances can be given that the commercial paper and line of credit program will be available at the time of, or during, such an event.

**August 2020 Heat Wave**

The State experienced a prolonged above average temperature from August 14, 2020 through August 18, 2020. The CAISO was forced to institute rotating electricity outages in the State during this extreme heat wave. SMUD, as a member of BANC, did not have to implement any planned power disruptions. Additionally, SMUD was able to support the CAISO during some hours of the heat wave with both requested emergency assistance and wholesale market sales. SMUD’s peak demand between August 14, 2020 and August 18, 2020, varied between 2,874 MW and 3,057 MW, well below SMUD’s record peak of 3,299 MW.

**Impacts from COVID-19 Pandemic**

The COVID-19 pandemic has dramatically altered the behavior of businesses and people in a manner that has had, and continues to have, negative effects on global and local economies. SMUD is still experiencing the impact from COVID-19, but the impact on SMUD has lessened since the height of the pandemic in 2020. Compared to weather adjusted, pre-pandemic load levels, SMUD is currently experiencing an approximately 2%-3% increase in residential customer load and an approximately 3% decrease in commercial customer load, resulting in almost no change in net load. The commercial customers currently experiencing the largest impacts of the pandemic appear to be medium sized commercial customers while the smallest and largest commercial customers appear to have returned to pre-pandemic load levels or are exceeding them. SMUD anticipates that load recovery will continue over the next couple of years resulting in continued movement towards pre-pandemic levels, but not a complete recovery as people continue to work from home long-term.

In addition, as a result of the pandemic, many businesses have closed or reduced operations, unemployment has dramatically increased, many employees have been furloughed and/or shifted to reduced working hours and an increased number of SMUD’s customers have been, and could continue to be, unable to pay their electric bills. Part of the governmental response to the economic consequences of the pandemic required utility providers (including SMUD) to provide additional grace periods and flexible payment plans for the payment of utility bills or to refrain from pursuing collection remedies for unpaid bills for a period of time. SMUD had also implemented a no-shutoff policy through January 2022 under which SMUD would not disconnect power to a customer for non-payment of its electric bill. Beginning in February 2022, SMUD
resumed its normal payment, late fee, and disconnection process and began disconnections of unpaid accounts in late April 2022. As a result, SMUD has experienced an increase in delinquencies for customer electric accounts versus pre-pandemic levels. In January 2022, SMUD received $41 million from the California Arrearage Payment Program (“CAPP”) and the funds were applied to delinquent balances. As of April 9, 2022, the total delinquencies for customer electric accounts were $74.3 million, after the CAPP credit, which is an increase from the February 2020 balance of total delinquencies for customer electric accounts of $16.9 million. SMUD has also paused the recertification process for existing customers in SMUD’s low-income discount program. The number of customers participating in the low-income assistance program increased by 14,700, or approximately 14% from February 2020 to March 2022. Although low-income assistance customers increased, program costs decreased by $0.7 million in 2021 compared to 2019 due to a previously approved program restructuring.

SMUD’s actual 2021 revenue exceeded the 2021 revenue forecast. Revenue in 2022 and 2023 is expected to increase as customers shift back to pre-pandemic energy usage patterns. On September 16, 2021, the Board also approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. See “RATES AND CUSTOMER BASE – Rates and Charges – 2021 Rate Action.”

While the full effects of the pandemic and its related consequences on SMUD’s financial results and operations are difficult to predict, SMUD’s financial results or operations could be materially adversely affected. If the pandemic and its consequences are prolonged, again become more severe or another similar event occurs, the likelihood of adverse impacts could be increased.

RATES AND CUSTOMER BASE

Rates and Charges

SMUD’s Board of Directors has autonomous authority to establish the rates charged for all SMUD services. Unlike IOUs and some other municipal utility systems, retail rate and revenue levels are not subject to review or regulation by any other federal, State or local governmental agencies. Changes to SMUD rates only require formal action by the Board of Directors after two public workshops and a public hearing. SMUD is not required by law to transfer any portion of its collections from customers to any local government. SMUD typically reviews and sets rates on a two-year cycle.

2019 Rate Action.

On June 24, 2019, the Board approved a 3.75% rate increase effective January 1, 2020, a 3.00% rate increase effective October 1, 2020, a 2.50% rate increase effective January 1, 2021, and a 2.00% rate increase effective October 1, 2021, for all customer classes. Additionally, the Board approved a restructuring of the commercial rates, including new time periods and an overall increase in the fixed bill components, such as the System Infrastructure Fixed Charge and demand charges, and a corresponding decrease in energy charges, making the restructuring revenue neutral by rate category. To minimize bill impacts, rate categories will be restructured over an 8-year period. Customers were transitioned to the new rates in the first quarter of 2022. There is currently pending litigation concerning the adoption of the 2020 and 2021 rates. See “LEGAL PROCEEDINGS – Proposition 26 Lawsuit.”

Due to the impacts of the COVID-19 pandemic on SMUD’s operations and priorities, on August 20, 2020, the Board approved postponing the implementation of the commercial rate restructure for one year.
2021 Rate Action.

On September 16, 2021, the Board approved a 1.5% rate increase effective March 1, 2022 and a 2.0% rate increase effective January 1, 2023 for all customer classes. Additionally, the Board approved the Solar and Storage Rate, the optional residential CPP rate, and updates to certain schedules of SMUD’s Open Access Transmission Tariff (“OATT”). The Board also approved a new timeline for the commercial rate restructure transition, and all impacted commercial customers were transitioned to the new rates by the end of the first quarter of 2022.

SMUD also implemented a solar interconnection fee based on the size of solar interconnection and supporting programs such as battery incentives, incentives to enroll in SMUD’s Critical Peak Pricing rate, battery incentives for Virtual Power Plants, and a program to bring the benefits of solar to under-resourced multi-family communities. These programs and fees are not subject to Board approval.

Rate Stabilization Funds

The Rate Stabilization Fund (the “RSF”) is maintained by SMUD to reduce the need for future rate increases when costs exceed existing rates. At the direction of the Board, amounts may be either transferred into the RSF (which reduces revenues) or transferred out of the RSF (which increases revenues). The Board authorizes RSF transfers on an event driven basis. The RSF includes funds to hedge variations in the volume of energy received from non-SMUD hydroelectric generation, variation in AB 32 revenue and variations in Low Carbon Fuel Credit (“LCFS”) revenue. As of March 31, 2022, the balance in the RSF was $137.5 million, approximately 8.8% of retail revenue.

Effective July 2008, SMUD implemented the HGA, which is a pass-through rate component to deal with variations in hydroelectric generation from the UARP (see “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Hydroelectric”). The HGA is designed to increase revenues in dry years when SMUD must buy power to replace hydroelectric generation and return money to the HRSF in wet years when SMUD has more hydroelectric generation than expected. Each year SMUD determines the impact of precipitation variances on projected hydroelectric generation from the UARP. When the precipitation variance results in a deficiency of hydroelectric generation from the UARP, transfers from the HRSF, which was created as a component of the RSF, to SMUD’s available cash, will be made in an amount approximating the cost to SMUD of replacement power (up to 4% of revenues) until the balance in the HRSF is zero. When the precipitation variance results in a projected surplus of hydroelectric generation from the UARP, deposits will be made into the HRSF in an amount approximating the positive impact to SMUD from the surplus hydroelectric generation (up to 4% of revenues) until the balance in the HRSF is equal to 6% of budgeted retail revenue (currently approximately $56 million). If the balance in the HRSF is not sufficient to cover transfers that would otherwise be made in the event of a projected deficiency in UARP hydroelectric generation, a 12-month HGA surcharge will automatically be included on customers’ electric bills at a level that generates up to 4% of retail revenue. If the balance in the HRSF is equal to 6% of budgeted retail revenue on any precipitation variance calculation date and the precipitation variance results in a projected UARP hydroelectric generation surplus, the positive impact of the surplus may be used for other purposes at staff’s recommendation, with the approval of the Board, including returned to customers through an electric bill discount up to 4% of retail revenue. SMUD calculates HRSF transfers based on an April-March (water year) precipitation period at Pacific House, California. This National Weather Service precipitation station is used to approximate available water supply to SMUD’s UARP hydropower reservoirs. As of March 31, 2022, precipitation at Pacific House, California totaled 38.34 inches which is below the 50-year rolling median of 50.52 inches.

As of March 31, 2022, the combined balance in the RSF and HRSF was $193.6 million. SMUD is forecasting a transfer of approximately $25.1 million out of the HRSF to SMUD’s available cash in April
2022 due to below average precipitation, which will decrease the balance in the HRSF from $56.1 million to approximately $31.0 million. Although the HRSF and the subaccount of the RSF that hedge variations in the volume of energy received from non-SMUD hydroelectric generation currently have positive balances, continued below average precipitation could deplete the HRSF and RSF balances to zero.

**Low Income Discount**

As of March 2022, approximately 90,102 customers received the low-income discount offered by SMUD, which represents approximately 16% of all residential customers. SMUD monitors the program to ensure participants continue to be eligible for the discount. In 2021, the total discount was approximately $29.5 million. As a result of the effects of the COVID-19 pandemic and related economic downturn, SMUD experienced an increase in low-income discount applicants. See “FACTORS AFFECTING THE REGION – Impacts from COVID-19 Pandemic.”

SMUD expanded its programs and services starting in 2016 to help customers with energy assistance, home improvement packages and education. SMUD is creating tailored solutions to best meet the needs of low-income customers. These solutions include free solar panels and inspecting homes to identify energy saving opportunities. As of March 2022, SMUD has performed 27,000 energy retrofits and, in partnership with Grid Alternatives (a non-profit organization that focuses on implementing solar power and energy efficiency for low-income families), 196 customers have benefited from free solar installations. Forty additional homes received solar and energy efficiency through a partnership with Habitat for Humanity of Greater Sacramento. As part of SMUD’s Zero Carbon Plan and the focus on building electrification, SMUD has also been ramping up electrification investments for low-income customers. Since 2019, SMUD has assisted more than 675 households with electrification upgrades.
Rate Comparisons

SMUD’s rates remain significantly below those of PG&E and other large utilities throughout the State. The following table sets forth the average charges per kWh by customer class for both SMUD and PG&E. PG&E’s rates reflect their recently approved rate effective March 1, 2022.

### AVERAGE CLASS RATES

<table>
<thead>
<tr>
<th>Class</th>
<th>SMUD Rates (cents/kWh)&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>PG&amp;E Rates (cents/kWh)&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>Percent SMUD is Below PG&amp;E&lt;sup&gt;(3)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential – Standard</td>
<td>17.57¢</td>
<td>33.57¢</td>
<td>47.6%</td>
</tr>
<tr>
<td>Residential – Low Income</td>
<td>12.18¢</td>
<td>20.91¢</td>
<td>41.7%</td>
</tr>
<tr>
<td><strong>All Residential</strong></td>
<td><strong>16.73¢</strong></td>
<td><strong>29.16¢</strong></td>
<td><strong>42.6%</strong></td>
</tr>
<tr>
<td>Small Commercial (Less than 20 kW)</td>
<td>17.01¢</td>
<td>32.24¢</td>
<td>47.3%</td>
</tr>
<tr>
<td>Small Commercial (21 to 299 kW)</td>
<td>15.76¢</td>
<td>30.69¢</td>
<td>48.6%</td>
</tr>
<tr>
<td>Medium Commercial (300 to 499 kW)</td>
<td>14.59¢</td>
<td>29.75¢</td>
<td>50.9%</td>
</tr>
<tr>
<td>Medium Commercial (500 to 999 kW)</td>
<td>13.65¢</td>
<td>25.73¢</td>
<td>47.0%</td>
</tr>
<tr>
<td>Large Commercial (Greater than 1,000 kW)</td>
<td>11.45¢</td>
<td>20.08¢</td>
<td>43.0%</td>
</tr>
<tr>
<td>Lighting – Traffic Signals</td>
<td>13.46¢</td>
<td>31.39¢</td>
<td>57.1%</td>
</tr>
<tr>
<td>Lighting – Street Lighting</td>
<td>15.17¢</td>
<td>35.57¢</td>
<td>57.3%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>15.10¢</td>
<td>29.19¢</td>
<td>48.3%</td>
</tr>
<tr>
<td><strong>System Average</strong></td>
<td><strong>15.26¢</strong></td>
<td><strong>27.76¢</strong></td>
<td><strong>45.0%</strong></td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Projected 2022 average prices for SMUD with rates effective October 1, 2021 and March 1, 2022.

<sup>(2)</sup> PG&E average prices in 2022 reflect rates effective March 1, 2022, per Advice Letter 6509-E- dated February 18, 2022.

<sup>(3)</sup> The rates in the Average Class Rates table are calculated by dividing the total revenue of each class by the total usage of that class in kWh. The actual savings per customer will vary based on their electricity consumption.
The following table shows a comparison of SMUD’s charges for the average residential usage of 750 kWh per month (based on an average of summer and non-summer) and charges of seven similar neighboring or largest utilities in the State.

### STATEWIDE COMPARISON–RESIDENTIAL SERVICE

<table>
<thead>
<tr>
<th>Utility</th>
<th>Monthly Billing Charge 750 kWh&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>Percent SMUD is (Below)/Above Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento Municipal Utility District&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$128.54</td>
<td></td>
</tr>
<tr>
<td>Pacific Gas &amp; Electric Company</td>
<td>$258.62</td>
<td>(50.3%)</td>
</tr>
<tr>
<td>Roseville Electric Utility</td>
<td>$116.20</td>
<td>10.6%</td>
</tr>
<tr>
<td>Turlock Irrigation District</td>
<td>$120.40</td>
<td>6.8%</td>
</tr>
<tr>
<td>Modesto Irrigation District</td>
<td>$134.53</td>
<td>(4.5%)</td>
</tr>
<tr>
<td>Southern California Edison Company</td>
<td>$172.74</td>
<td>(25.6%)</td>
</tr>
<tr>
<td>Los Angeles Dept. of Water &amp; Power</td>
<td>$217.72</td>
<td>(41.0%)</td>
</tr>
<tr>
<td>San Diego Gas and Electric Company</td>
<td>$306.45</td>
<td>(58.1%)</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Includes approved March 1, 2022 rates.

<sup>(2)</sup> Per individual utility’s published schedules as of March 1, 2022.

[Remainder of Page Intentionally Left Blank]
Allocation of Revenue by Customer Class

The following chart sets forth the forecast percentage of SMUD revenues from billed sales associated with each customer class.

![2022 Revenue Forecast Chart]

[Remainder of Page Intentionally Left Blank]
A stabilizing influence on SMUD’s revenues is that a substantial proportion is derived from residential customers (49.6% in 2021). Historically, revenue from commercial and industrial consumption has been more sensitive to economic fluctuation. Furthermore, SMUD has no dominant customers that account for a significant percentage of annual revenues. In 2021, no single customer contributed more than 3% of revenues. The top ten customers generated approximately 11% of revenues and the top 30 generated approximately 17%. The following table presents information on SMUD’s top ten customers as of December 31, 2021.

### SMUD’s Largest Customers
(As of December 31, 2021)

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Annual Revenue ($ millions)</th>
<th>% of Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>$37.46</td>
<td>2.43%</td>
</tr>
<tr>
<td>Government</td>
<td>$32.42</td>
<td>2.10%</td>
</tr>
<tr>
<td>Government</td>
<td>$30.43</td>
<td>1.98%</td>
</tr>
<tr>
<td>Technology</td>
<td>$13.57</td>
<td>0.88%</td>
</tr>
<tr>
<td>Government</td>
<td>$13.20</td>
<td>0.86%</td>
</tr>
<tr>
<td>Communications</td>
<td>$9.89</td>
<td>0.64%</td>
</tr>
<tr>
<td>Industrial Gases</td>
<td>$9.07</td>
<td>0.59%</td>
</tr>
<tr>
<td>Grocery</td>
<td>$7.31</td>
<td>0.47%</td>
</tr>
<tr>
<td>Government</td>
<td>$7.22</td>
<td>0.47%</td>
</tr>
<tr>
<td>Government</td>
<td>$6.73</td>
<td>0.44%</td>
</tr>
<tr>
<td><strong>Top 10 Total</strong></td>
<td><strong>$167.28</strong></td>
<td><strong>10.86%</strong></td>
</tr>
</tbody>
</table>

[Remainder of Page Intentionally Left Blank]
POWER SUPPLY AND TRANSMISSION

Power Supply Resources

The following table sets forth information concerning SMUD’s power supply resources as of March 31, 2022. Capacity availability reflects expected capacities at SMUD’s load center, as well as entitlement, firm allocations and contract amounts in the month of July, which is generally SMUD’s peak month.

POWER SUPPLY RESOURCES
(As of March 31, 2022)

<table>
<thead>
<tr>
<th>Source:</th>
<th>Capacity Available (MW)(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generating Facilities:</strong></td>
<td></td>
</tr>
<tr>
<td>Upper American River Project – Hydroelectric</td>
<td>685</td>
</tr>
<tr>
<td>Solano Wind Project – Wind(2)</td>
<td>120</td>
</tr>
<tr>
<td>Hedge Battery(2)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sub-total:</strong></td>
<td><strong>809</strong></td>
</tr>
<tr>
<td><strong>Local Gas-Fired Plants:</strong></td>
<td></td>
</tr>
<tr>
<td>SFA (Cosumnes)</td>
<td>570</td>
</tr>
<tr>
<td>CVFA (Carson-Ice)</td>
<td>103</td>
</tr>
<tr>
<td>SCA (Procter &amp; Gamble)</td>
<td>166</td>
</tr>
<tr>
<td>SPA (McClellan)</td>
<td>72</td>
</tr>
<tr>
<td>SPA (Campbell Soup)</td>
<td>170</td>
</tr>
<tr>
<td><strong>Sub-total:</strong></td>
<td><strong>1,081</strong></td>
</tr>
<tr>
<td><strong>Purchased Power:</strong></td>
<td></td>
</tr>
<tr>
<td>Western Area Power Administration (WAPA) (3)(4)</td>
<td>272</td>
</tr>
<tr>
<td>Grady – Wind(2)</td>
<td>67</td>
</tr>
<tr>
<td>Iberdrola (PPM) – Wind(2)</td>
<td>32</td>
</tr>
<tr>
<td>Feed-in-Tariff Photovoltaic – Solar(2)</td>
<td>27</td>
</tr>
<tr>
<td>Rancho Seco Solar(2)</td>
<td>73</td>
</tr>
<tr>
<td>NTUA Navajo Drew Solar(2)</td>
<td>56</td>
</tr>
<tr>
<td>Recurrent – Solar(2)</td>
<td>39</td>
</tr>
<tr>
<td>Wildflower Solar(2)</td>
<td>11</td>
</tr>
<tr>
<td>CalGeo – Geothermal</td>
<td>26</td>
</tr>
<tr>
<td>Patua (Gradient/Vulcan) – Geothermal</td>
<td>12</td>
</tr>
<tr>
<td>Other Long-Term Contracts</td>
<td>18</td>
</tr>
<tr>
<td>ELCC Portfolio Adjustment(2)</td>
<td>(53)</td>
</tr>
<tr>
<td>Firm Contract Reserves(4)</td>
<td>14</td>
</tr>
<tr>
<td>Committed Short-Term Purchases(5)</td>
<td>708</td>
</tr>
<tr>
<td>Uncommitted Short-Term Purchases</td>
<td>88</td>
</tr>
<tr>
<td><strong>Sub-total:</strong></td>
<td><strong>1,366</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,255</strong></td>
</tr>
</tbody>
</table>

(1) Available capacity is the net capacity available to serve SMUD’s system peak load during the month of July.
(2) Capacity values shown are based on resource effective load carrying capability modeling.
(3) Total includes SMUD’s Base Resource share and WAPA Customer allocations.
(4) Assumes firm reserves of 5% are included.
(5) Committed Short-Term Purchases are primarily purchased on a year-ahead to season-ahead basis from various sources.

Note: Totals may not add due to rounding.
Power Generation Facilities

Hydroelectric. The UARP consists of three relatively large storage reservoirs (Union Valley, Loon Lake and Ice House) with an aggregate water storage capacity of approximately 400,000 acre-feet and eight small reservoirs. Project facilities also include eight tunnels with a combined length of over 26 miles and eight powerhouses containing 11 turbines. In addition to providing clean hydroelectric power and operating flexibility for SMUD, the UARP area provides habitat for fish and wildlife and a variety of recreational opportunities, including camping, fishing, boating, hiking, horseback riding, mountain biking and cross-country skiing.

The combined capacity of the UARP is approximately 673 MW at SMUD’s load center in Sacramento. Under current licensing and mean water conditions, these facilities are expected to generate approximately 1,600 GWh of electric energy annually, which represents approximately 15% of SMUD’s current average annual retail energy requirements. In 1957, the Federal Power Commission (predecessor agency to FERC) issued a license to SMUD for the UARP. This 50-year license was subsequently amended to add and upgrade facilities and now includes all segments of SMUD’s hydroelectric facilities located on the South Fork of the American River and its tributaries upstream from the Chili Bar Project (described below). Before the original FERC license expired in 2007, SMUD reached a settlement agreement with federal and state regulatory land management agencies, nongovernmental organizations, and other interested stakeholders on proposed terms and conditions to be included in a new FERC license for the UARP. The settlement agreement was filed with the FERC on February 1, 2007.

On October 4, 2013 the California State Water Resources Control Board (the “SWRCB”) issued a 401 Water Quality Permit as required by the Clean Water Act, and on July 23, 2014 FERC issued a new 50 year license for the UARP. The new license followed the Settlement Agreement filed in 2007. The new license includes increases in environmental flow releases, and recreational flows at several locations. The estimated loss of generation is approximately 100 GWh per year and an additional $15 million of O&M and capital costs per year.

On June 16, 2021, pursuant to Board authorization, SMUD acquired the Chili Bar Hydroelectric Project which consists of a 7 MW powerhouse, reservoir, dam and spillway, north of Placerville on the South Fork of the American River for approximately $10.4 million (the “Chili Bar Project”). The Chili Bar Project is immediately downstream from the UARP and operates as the regulating reservoir for the UARP’s largest powerhouse. Owning the UARP and the Chili Bar Project enables SMUD to operate the two projects with a holistic approach to license compliance and generation efficiency.

Solano Wind Project. SMUD owns and operates a 102 MW wind project, located in Solano County, known as Solano Phases 1 and 2. Solano Phases 1 and 2 consist of 23 wind turbine generators (“WTG”) rated at 660 kilowatts (“kW”) each, and 29 WTGs rated at 3 MW each, respectively. Energy from the project is collected at 21 kV and transmitted over a dedicated 3-mile overhead system to the SMUD-owned Russell substation. At the Russell facility, the energy is transformed to 230 kV and interconnected to PG&E’s Birds Landing Switching Station. Energy deliveries are scheduled through the CAISO.

Solano 3 Project. In 2011 and 2012, SMUD constructed a 128 MW wind project adjacent to Solano Phases 1 and 2, known as Solano 3. The Solano 3 project consists of 55 WTGs rated at 1.8 MW and 3.0 MW, and interconnects at the Russell substation. The Solano 3 project was sold to Solano 3 Wind, LLC, a subsidiary of Citigroup, in December of 2011. The transaction included an option for SMUD to repurchase the Solano 3 project at year six, eight or fifteen. SMUD exercised its repurchase option at year six, and completed this transaction and transfer of ownership in April 2018.
Solano 4 Project. SMUD is developing the Solano 4 Wind Project. The Solano 4 Wind Project currently plans to utilize SMUD-owned land near the Solano 3 project, known as the Collinsville and Roberts properties, to install 10 WTGs rated at 4.5MW, and to remove the Solano Phase 1 turbines and replace them with 9 WTGs rated at 4.5 MW. In 2019, SMUD secured the wind rights on the Roberts property and removed the wind turbines on that property. SMUD received the Cluster II Phase I Study results from the CAISO in January 2019, provided the initial security posting in April 2019, and received the Phase II Study Report in November 2019, furthering the process towards a Large Generator Interconnection Agreement. SMUD has met all of the CAISO requirements and has executed a Large Generator Interconnection Agreement as of June 2021 that will allow for 90.8 MW of capacity at the point of interconnection. WAPA and PG&E identified upgrades needed to interconnect the Solano 4 Wind Project that may not be complete before 2024. The WAPA impacts have been resolved at no cost. PG&E has an approved project and expects to complete the needed upgrades by May of 2025. In April 2021, SMUD submitted an application for advisory review by the Solano County Airport Land Use Commission (the “Solano ALUC”) of the Solano 4 Wind Project’s consistency with the 2015 Travis Air Force Base Land Use Compatibility Plan (the “Travis Plan”). In May 2021, the Solano ALUC purported to resolve that the Solano 4 Wind Project was inconsistent with the Travis Plan. In August 2021, the Board approved the Project Environmental Impact Report, made findings overriding the Solano ALUC’s finding of inconsistency, made findings there was no alternative to the project, and approved the Solano 4 Wind Project. In addition, SMUD applied for and obtained extensions of the Federal Aviation Administration Determinations of No Hazard allowing for construction of the turbines. They remain valid as long as SMUD awards a contract by the end of July 2022. SMUD released the Request for Proposals to construct the Solano 4 Wind Project in May 2021 and has received bids and is working toward a contract award mid-2022. The expected operation date for the project is May 2024. Full project capacity may be delayed into the first quarter of 2025 due to the timeframe established for the PG&E required upgrades. SMUD has developed a mitigation plan for the limited interconnection capacity for the first year of operation, in coordination with CAISO and PG&E, of using all of the existing SMUD Solano Russell substation interconnection capacity combined to dispatch all the projects under. SMUD expects to complete the administrative process to allow for this by late 2022.

Solar Photovoltaic. SMUD owns and operates approximately 2 MW of solar photovoltaic generating facilities. These facilities include installations at the Hedge Substation property, SMUD Headquarters, the East Campus Operations Center, and other smaller photovoltaic systems throughout the service area on parking lots.

Local Gas-Fired Plants. SMUD constructed five local natural gas-fired plants in its service area: the CVFA Project, the SCA Project, the SPA Project, SPA McClellan and the SFA Project (each defined below). These five plants are referred to collectively as the “Local Gas-Fired Plants.” These plants are a strategic component of SMUD’s resource mix. In addition to providing SMUD a total capacity of approximately 1,139 MW, the Local Gas-Fired Plants provide SMUD with needed voltage support, operational and load following capability, and the reliability inherent in having power resources located close to loads. With the exception of SPA McClellan, these plants were financed through the issuance of project revenue bonds by separate joint powers authorities (collectively, the “Authorities”). In late 2021, ownership of all of the Local Gas-Fired Plants was transferred to one of the Authorities, SFA. SMUD has entered into long-term agreements with SFA providing for the purchase by SMUD of all of the power from each of the Local Gas-Fired Plants. This consolidation created operational and administrative efficiencies without changing any of the functionality of the power plants. Although the Local Gas-Fired Plants are owned by SFA, SMUD has exclusive control of their dispatch and manages their operations as part of its overall power supply strategy.

Payments under the power purchase agreements are payable from the revenues of SMUD’s Electric System prior to the payment of the principal of or interest on SMUD’s Senior Bonds and Subordinated
Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below), as are other maintenance and operation costs and energy payments. For further discussion of SMUD’s obligations to make these payments to SFA, see “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS – Outstanding Indebtedness – Joint Powers Authorities.”

The following is a brief description of the five Local Gas-Fired Plants:

**The Cosumnes Power Plant (the “SFA Project”).** The SFA Project is a 612 MW natural gas-fired, combined cycle plant located in the southern portion of Sacramento County adjacent to SMUD’s decommissioned Rancho Seco Nuclear Power Plant. Commercial operation of the SFA Project commenced on February 24, 2006. SFA increased the net generating capacity of the facility by 81 MWs via an Advanced Gas Path (“AGP”) upgrade. The additional AGP generation was realized after hardware and software upgrades were completed on both units in March of 2019. The SFA Project is owned by SFA, a joint powers authority formed by SMUD and MID. The existing take-or-pay power purchase agreement between SMUD and SFA expires no earlier than when the related bonds have been paid in full (the outstanding related bonds are scheduled to mature on July 1, 2030).

**The CVFA Carson Cogeneration Project (the “CVFA Project”).** The CVFA Project, a 103 MW natural-gas-fired cogeneration project consisting of separate combined cycle and peaking plants, provides steam to the Sacramento Regional County Sanitation District (“SRCSD”) wastewater treatment plant adjacent to the site. The CVFA Project was originally owned by the CVFA, a joint powers authority formed by SMUD and the SRCSD. Construction of the CVFA Project was completed and the plant began commercial operation on October 11, 1995. The CVFA bonds were defeased in September 2019. In late 2021, ownership of the CVFA Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the CVFA Project (the “CVFA PPA”) will be in effect until terminated by SMUD.

**The SCA Procter & Gamble Cogeneration Project (the “SCA Project”).** The SCA Project, a 182 MW natural gas-fired cogeneration facility, is located in an established industrial area of Sacramento. The initial combined cycle portion of the plant began commercial operation on March 1, 1997. Construction of the peaking plant portion of the SCA Project commenced during 2000 and the unit achieved commercial status on April 24, 2001. The SCA Project produces steam for use in Procter & Gamble Manufacturing Company’s oleochemical manufacturing processes and electricity for sale to SMUD. The SCA Project was originally owned by the SCA, a joint powers authority formed by SMUD and SFA, a separate joint powers authority. The SCA bonds were defeased in September 2019. In late 2021, ownership of the SCA Project was transferred to SFA. The take-or-pay power purchase agreement between SMUD and SFA relating to the SCA Project (the “SCA PPA”) will be in effect until terminated by SMUD.

**The SPA Campbell Soup Cogeneration Project (the “SPA Project”).** The SPA Project, a 170 MW natural gas-fired cogeneration project, was completed and began commercial operations on December 4, 1997. Upgrades were implemented during 2000, which increased the plant’s peaking capacity to 180 MW, well above its net demonstrated capacity of 159.8 MW. The plant is located in south Sacramento adjacent to the Capital Commerce Center (formerly the Campbell Soup Company food processing facility). The SPA Project was originally owned by SPA, a joint powers authority formed by SMUD and SFA. The SPA bonds were redeemed in July 2015. In late 2021, ownership of the SPA Project was transferred to SFA. The power purchase agreement between SMUD and SFA relating to the SPA Project (the “SPA PPA”) covers both the SPA Project and SPA McClellan and will be in effect until terminated by SMUD. As part of the Zero Carbon Plan, SMUD is exploring retiring the SPA Project in 2025 pending a feasibility assessment. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”
The SPA McClellan Gas Turbine ("SPA McClellan"). SPA McClellan is a 72 MW natural gas-fired simple cycle combustion turbine generating plant at McClellan Business Park in Sacramento. This turbine is connected to SMUD’s electric system and is operated to meet SMUD’s peak-load requirements. SPA McClellan is aligned for remote starting and operation with both black start and fast start capabilities. SMUD constructed the McClellan unit in 1986 as a 50 MW emergency power source for the McClellan Air Force Base. In 2001, following the Air Force Base closure, McClellan was upgraded to 72 MW and converted for SMUD use. In May 2007, SMUD transferred ownership of the McClellan Gas Turbine to SPA for more efficient operation. SPA did not issue debt related to SPA McClellan. In late 2021, ownership of SPA McClellan was transferred to SFA. SFA passes all costs of operations and maintenance through to SMUD in accordance with the terms of the SPA PPA. In exchange for paying all costs related to SPA McClellan, SMUD receives all of the power generated thereby. As part of the Zero Carbon Plan, SMUD is exploring retiring SPA McClellan in 2024 pending a feasibility assessment. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – 2030 Zero Carbon Plan.”

Fuel Supply

General. SMUD is obligated to arrange for the purchase and delivery of natural gas to the Local Gas-Fired Plants. Management of the natural gas procurement and delivery process is a key focus of SMUD’s reliability and risk policies. Although the natural gas consumption of the power plants for SMUD’s load can vary significantly depending on the season, precipitation, and the market price of power and natural gas, the plants are forecasted to need, on average in 2022, a total of approximately 96,000 Decatherms per day ("Dth/day") with a daily peak slightly more than 171,000 Dth/day of natural gas. Due to a gradual decline in natural gas consumption, SMUD is forecasting consumption of approximately 75,000 Dth/day in 2024. SMUD has implemented a comprehensive strategy to secure a reliable and diversified fuel supply through a variety of agreements for the supply, transportation, and storage of natural gas.

Supply. SMUD hedges a significant portion of its expected gas needs to meet customer power requirements. This includes gas for the Local Gas-Fired Plants and for the Sutter Energy Center. See “Power Purchase Agreements – Sutter Energy Center”. This is accomplished through a combination of long-term supply arrangements and an exposure reduction program. The program consists of a primary rolling three-year exposure reduction component, as well as supplemental fixed calendar year components reaching out five calendar years. Long-term arrangements may consist of a combination of physical commodity supply contracts, financial hedges, or options. Natural gas is purchased from a wide variety of producers and marketers at the northern and southern California borders, at Alberta, Canada and from the San Juan and the Rocky Mountain supply basins. SMUD has a number of both fixed-price supply agreements and financial hedging contracts to fix gas costs ranging from one month to several years in duration. Including fixed price biogas contracts as of March 31, 2022, these contracts have hedged the price of approximately 68%, 70% and 65% of SMUD’s forecasted natural gas requirements for 2022, 2023 and 2024, respectively. While the financial effects resulting from the unhedged portions of SMUD’s natural gas requirements are difficult to predict, SMUD’s financial results could be materially impacted.

SMUD has contracted with the Northern California Gas Authority No. 1 ("NCGA") to purchase an approximate average of 8,700Dth/day over the remaining life of a contract expiring May 31, 2027 (the "NCGA Contract"). Under the NCGA contract, SMUD pays a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts. Currently the delivery point for the NCGA Contract is the AECO hub in Alberta. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. To increase delivery efficiencies, SMUD expects to exchange the gas delivered at the AECO hub under the NCGA Contract with gas delivered at the Malin receipt point beginning in 2023. SMUD has also contracted with the Northern California Energy Authority ("NCEA") to purchase an approximate average of 22,000 Dth/day or to be converted to the approximate value in
MegaWatt-hours ("MWh") of electricity over the remaining life of a contract expiring on May 31, 2049. The gas will be delivered to the SMUD system via the Malin receipt point on the PG&E backbone system. SMUD is using its long-term transport capacity to deliver the fuel to the local area plants. SMUD will pay a discounted variable price for the fuel and anticipates periodically fixing the effective price under separate hedging contracts.

**Renewable Natural Gas Supply.** As a component of meeting SMUD's RPS goals, SMUD procures renewable natural gas and digester gas as fuels to generate renewable electricity from the SFA Project. Descriptions of the renewable natural gas supply agreements are provided below.

In March 2009, SMUD entered into a 15-year contract (that qualifies as renewable energy) with Shell Energy North America (US), L.P. ("Shell Energy") to purchase up to 6,000 Dth/day of renewable natural gas produced from a landfill project in Texas. SMUD began taking deliveries of this supply in April 2009. In March 2012, SMUD amended the contract with Shell Energy to increase the maximum volumes to 7,300 Dth/day and extended the term by 10 years to March 31, 2034. Currently, the delivery point is PG&E Topock and SMUD is using its long-term transport capacity to deliver it to the SFA Project. In 2016, SMUD entered into a 3-year contract with Shell Energy to sell back the entire volume of renewable natural gas purchased, less 500 Dth/day, to be sold into the vehicle transportation markets. Upon expiration of the initial 3-year contract for the sale of biogas to Shell Energy, SMUD extended the sell back of the entire volume of biogas for an additional 3 years with Element Markets, starting in 2020.

SMUD contracted with Heartland Renewable Energy, LLC ("HRE") in December 2009 for a 20-year supply of up to 7,000 Dth/day of renewable natural gas from a digester facility in Colorado. Deliveries began in March of 2014. Currently, the delivery point is Opal, Wyoming and SMUD uses its long-term transport capacity to deliver it to the SFA Project. HRE has not delivered volumes from the project to SMUD since December 2016 due to current litigation with Weld County, Colorado regarding odor and permit issues. EDF Renewables, the majority owner of HRE, notified SMUD in August of 2017 that it is in discussions with a short list of bidders to sell its interests in the facility. In June of 2020, the project was purchased and SMUD’s contract was assigned to the new owner, Platte River Biogas, LLC ("PRB"). SMUD and PRB terminated the contract in the third quarter of 2021.

In September 2011, SMUD and CVFA entered into a “Digester Gas Purchase and Sale Agreement” through which the CVFA Project cleans nearly all of the digester gas received from SRCSD and sells it to SMUD for delivery to the SFA Project. In return, SMUD pays all of the CVFA Project’s costs in acquiring, cleaning and making the gas available to SMUD. The Digester Gas Purchase and Sale Agreement expires in September 2025. In late 2021, the Digester Gas Purchase and Sale Agreement, along with the CVFA Project was transferred to SFA. The CVFA Project is currently receiving, processing and selling up to 1,500 Dth/day with provisions for volume increases over time to 2,500 Dth/day. Digester gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations.

In December 2011, SMUD entered into a 20-year agreement with EIF KC Landfill Gas LLC ("EIF") to purchase up to 7,050 Dth/day of renewable natural gas produced from multiple landfill projects. SMUD began taking deliveries of this supply in January 2014. Currently the delivery point is Kern River – Opal and SMUD uses its long-term transport capacity to deliver it to the SFA Project. Renewable natural gas, when designated for use in SMUD’s power plants, is counted as renewable generation towards SMUD’s RPS obligations. In April 2022 SMUD entered into a transaction to sell the renewable natural gas purchased into the vehicle transportation markets. The transaction expires in March 2025.

AB 2196 is a law that defines the criteria by which existing and future renewable natural gas contracts will qualify for the State RPS program. The CEC adopted a RPS Eligibility Guidebook on April
30, 2013, which includes detailed rules for implementation of AB 2196. SMUD received an updated certificate of eligibility from the CEC in July 2014 for the SFA Project that included the quantities of renewable natural gas from all four contracts. The CEC adopted a revised RPS Eligibility Guidebook (Ninth Edition) on April 27, 2017. This latest guidebook did not change the RPS eligibility of any of the above SMUD renewable natural gas and digester gas contracts, but did simplify reporting requirements for these contracts. When fully delivering, these contracts represent roughly 30% of SMUD’s 2020 RPS requirement.

Gas Transmission

SMUD has satisfied its obligation to deliver natural gas to its power plants by constructing a natural gas pipeline, purchasing an equity interest in two PG&E backbone gas transmission lines, and contracting for capacity on a number of existing interstate natural gas transmission lines.

The Local Pipeline. SMUD constructed and owns a 20-inch, 50-mile natural gas pipeline in the greater Sacramento area (the “Local Pipeline”) that transports gas to all of the Local Gas-Fired Plants except SPA McClellan. The Local Pipeline is interconnected with PG&E’s major State gas transmission lines 300 and 401. Additionally, it may be interconnected with one or more private gas gathering pipelines located in the area, a gas storage project and/or other FERC approved pipelines that may be built in the local area. In conjunction with the construction of the SFA Project, SMUD extended the Local Pipeline to the plant site. The 26-mile extension was completed in 2004. The extension is 24 inches in diameter and was designed to serve both the SFA Project and an additional second phase, if constructed.

PG&E Backbone Gas Transmission Lines 300 and 401. In 1996, SMUD purchased an equity interest in PG&E’s backbone gas transmission lines 300 and 401 (referred to as the PG&E backbone). The total capacity acquired at that time was approximately 85,000 Dth/day and consisted of approximately 43,600 Dth/day of firm gas transport from the California–Oregon border at Malin, Oregon and 44,700 Dth/day from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California. SMUD was also entitled to a share of non-firm capacity, which was approximately 4,360 Dth/day; making the total capacity potentially available to SMUD almost 90,000 Dth/day. This purchase made SMUD a co-owner of the PG&E backbone gas transmission lines 300 and 401 and obligated SMUD to pay PG&E to operate the pipelines on its behalf subject to the terms of the purchase agreement and operating protocols. PG&E reduced operating pressures on Line 300 after PG&E suffered a natural gas explosion in San Bruno, CA in September of 2010. As a result of the reduced operating pressures on Line 300 and a related settlement between PG&E and SMUD, SMUD now holds a total capacity of approximately 88,000 Dth/day, consisting of approximately 47,620 Dth/day of firm gas transport from the California–Oregon border at Malin, and 39,233 Dth/day of firm gas transport from the California–Arizona border at Topock, Arizona, to SMUD’s interconnection with the PG&E backbone near Winters, California.

SMUD also holds additional backbone capacity under tariff service for 5,000 Dth/day of northern path (Redwood) capacity. This contract expires in June 2023.

Kern River Gas Transmission Company Long Term Agreement. SMUD has an agreement with Kern River Gas Transmission Company for 20,000 Dth/day of firm capacity through April 30, 2028. This capacity gives SMUD access to the Rocky Mountain supply basin at Opal, Wyoming, and connects to PG&E Line 300 (owned in part by SMUD) at Daggett, California.

TransCanada Firm Transmission Service Agreements. SMUD has several agreements with TransCanada Corporation that give SMUD access to Canadian supply from the Alberta basin to Kingsgate, British Columbia and the California-Oregon border at Malin. SMUD has agreements for 22,101 Dth/day...
at the California-Oregon border at Malin via the Gas Transmission Northwest (“GTN”) pipeline that expires in 2023. SMUD has agreements for approximately 12,000 Dth/day from the Alberta ANG/Foothills pipeline, also expiring in 2023. In order to match the Canadian capacity with the takeaway capacity at Malin, SMUD has an agreement with Foothills Pipeline for approximately 10,000 Dth/day that expires on October 31, 2022. Currently, SMUD is not planning to renew GTN, Alberta ANG/Foothills and Foothills Pipeline.

SMUD’s diversified portfolio of gas transmission arrangements allow for the purchase of gas from a variety of suppliers and locations, and the opportunity to capitalize on regional price differentials where possible. In addition, its ownership interest in the SMUD/PG&E backbone and Local Pipeline enhances the reliability of SMUD’s gas supply.

**Gas Storage**

SMUD also employs gas storage as part of its overall fuel supply strategy. Gas storage is useful in helping to balance gas supply, mitigate market price volatility, and provide a reliable supply to meet peak day delivery requirements.

SMUD also has a contract with Lodi Gas Storage, LLC, which began in April 2018 and expires in March 2023, for capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

SMUD has a second contract with Lodi Gas Storage, LLC, which began in April 2022 and expires in March 2024, for additional capacity in the Lodi Gas Storage project located near Acampo in northern California. The contract provides SMUD with capacity levels of 1.0 million Dth of storage inventory, 10,000 Dth/day of injection rights and 20,000 Dth/day of withdrawal capacity.

**Power Purchase Agreements**

SMUD has a number of power purchase agreements to help meet its power requirements. Some of these agreements are described below.

**Western Area Power Administration.** Effective January 1, 2005, SMUD entered into a 20-year contract with WAPA. SMUD has entered into a replacement agreement extending the term by 30 years for the period of January 1, 2025 through December 31, 2054. Power sold under this contract is generated by the Central Valley Project (“CVP”), a series of federal hydroelectric facilities in northern California operated by the United States Bureau of Reclamation. The contract provides WAPA’s CVP Base Resource customers (including SMUD) delivery of a percentage share of project generation in return for reimbursement of an equivalent share of project costs. SMUD’s CVP Base Resource share is roughly 25% of project generation and costs. This is expected to be approximately 318 MW of capacity and 661 GWh of energy in an average water year but will vary depending on precipitation. Energy available under the contract is determined by water releases required for water supply and flood control and is then shaped into higher value periods within other CVP operating constraints. More capacity and energy are typically available in spring and summer months and less in fall and winter.

SMUD also has a contract with WAPA expiring December 31, 2024, by which WAPA delivers an additional 200-300 MW per hour from projects located in the Pacific Northwest based on certain contractual parameters. In 2021, SMUD received 1,100 GWh of energy under this contract.
Avangrid (formerly Iberdrola Renewables (“Iberdrola”)). SMUD has a contract with Iberdrola that provide SMUD with bundled renewable energy (energy plus RECs). The contract agreement is for 126 GWh of wind power generated in Solano County, California. The SMUD Board approved an extension of the wind contract through June 30, 2025.

Patua Project LLC. In April 2010, SMUD entered into a power purchase agreement with Patua Project LLC (“Patua”), a subsidiary of Gradient Resources, for the delivery of up to 132 MW (expected to be 120 MW nominal power output) of renewable energy from geothermal generation being developed in north central Nevada, from a Gradient Resources project known as the Patua Project. The project was to have been developed in three phases. Since 2010, the agreed upon capacity has been reduced several times. In December 2013, Phase 1 of the project, which had been reduced to 30 MW, finally achieved commercial operation. In 2014, the parties concluded negotiations on the fourth amendment to the power purchase agreement with Patua, which reduced the total capacity down to 40 MW, extended the commercial operation date of Phase 2 to January 1, 2016, and allowed Patua to add up to 13 MW of solar photovoltaics to supplement geothermal production. In addition, this amendment shifted responsibility to Patua for a portion of the long-term transmission service agreements that have been underutilized due to the project not meeting its targets. In November 2015, the Patua Project was acquired by TL Power, LLC, a wholly owned subsidiary of Cyrq Energy, Inc. (“Cyrq”). In December 2015, Cyrq terminated Phase 2. Upon termination of Phase 2, the contractual right for Cyrq to add solar photovoltaics to supplement geothermal production was reduced to 10 MW. As a result of poor performance during the first year of operation, SMUD reduced its obligation to take power from 30 MW to 25 MW. Performance continued to lag in 2015 and 2016 and SMUD further reduced its obligation to take power from 25 MW to 19 MW.

Renewable Energy Feed-In Tariff. In September 2009, SMUD’s Board authorized a feed-in tariff program for the purchase of renewable energy from local renewable energy projects connected to SMUD’s distribution system. SMUD’s Board authorized connection of up to 100 MW under the feed-in tariff which included standard payment rates and standard purchase terms for power. The feed-in tariff program became effective on January 1, 2010. Under the feed-in tariff, SMUD has executed 20-year term power purchase agreements for solar projects totaling 98.5 MW. Construction and start-up was completed on all projects between 2010 and 2012.

CalEnergy LLC. In August 2014, SMUD entered into a 22-year power purchase agreement with CalEnergy LLC for the purchase of 30 MWs per year of renewable energy from its Salton Sea geothermal facilities. As of July 1, 2017, SMUD began receiving up to 10 MWs from the CalEnergy portfolio, which escalated to the full 30 MWs on May 1, 2020.

Rancho Seco Solar. In October 2015, SMUD entered into a 20-year power purchase agreement with Rancho Seco Solar LLC for the purchase of energy from a 10.88 MW solar PV project sited on SMUD’s property at the closed Rancho Seco Nuclear Generating Station. Commercial operation was achieved in August of 2016. Rancho Seco Solar LLC leased the property from SMUD under a land lease agreement. The output of this project will directly serve two large commercial customers having executed agreements with SMUD for retail supply of solar power.

In May 2019, SMUD entered into a 30-year power purchase agreement for an additional 160 MW solar PV project with Rancho Seco Solar II, LLC. The project is located on SMUD-owned property at the closed Rancho Seco Nuclear Generating Station, adjacent to the existing 10.88 MW solar PV project. Construction began in 2019, and the project became commercially operable in February 2021.

Grady Wind Energy. In October 2015, SMUD entered into a 25-year power purchase agreement with Grady Wind Energy LLC (“Grady”) for the purchase of energy from a 200 MW wind project located in New Mexico (the “Grady Project”). The Grady Project began commercial operations on August 5, 2019.
Energy from the Grady Project is delivered to CAISO. SMUD purchases 100% of the Grady Project output which includes energy, renewable energy credits, and capacity attributes. SMUD and Grady have a short-term (6-month) agreement spanning the winter 2021-spring 2022 season wherein Grady has the option to pay SMUD to curtail up to 100 MW. This agreement does not affect the remaining term of the agreement.

**Great Valley Solar 2, LLC.** In January 2017, SMUD entered into a 20-year power purchase agreement with Great Valley Solar 2, LLC for the purchase of energy from a 60 MW solar PV project located in Fresno County, California. The project’s commercial operation date was December 28, 2017.

**ARP-Loyalton Cogen LLC.** On September 14, 2016, Senate Bill 859 (“SB 859”) was signed into law. Under SB 859, POU must procure its proportionate share of 125 MWs of renewable energy from biomass plants burning high hazard forest fuels, subject to terms of at least five years. Seven POUs (SMUD, MID, Turlock Irrigation District (“TID”), Anaheim Public Utilities, Imperial Irrigation District, Los Angeles Department of Water & Power and Riverside Public Utilities) jointly solicited proposals for up to 29 MW of contract capacity for renewable energy to meet the requirements of SB 859. In January 2018, SMUD entered into a 5-year power purchase agreement with ARP-Loyalton Cogen LLC to fulfill 18 MWs of the required 29 MWs with SMUD’s share being just over 23 percent. The contract became effective on April 1, 2018. On February 18, 2020, ARP-Loyalton Cogen LLC filed for Chapter 11 bankruptcy and stopped producing and selling energy from the biomass plant. On May 7, 2020, the bankruptcy court approved the sale of the Loyalton facility to Sierra Valley Enterprises, LLC (“SVE”). SVE is interested in bringing the facility back into service to produce power again and is currently reviewing the terms of the agreement. If SVE is not willing to accept the terms of the agreement, the POU parties will discuss their options, which may include amending the agreement or issuing a new request for proposals for the remainder of the five-year term.

**Roseburg Forest Products Co.** For the remaining SB 859 biomass obligation of 11 MW, SMUD and the other POUs have entered into a five-year power purchase agreement with Roseburg Forest Products Co. SMUD’s share of the contract capacity is 2.5795 MW, and the plant began operating under the contract on February 26, 2021.

**Sutter Energy Center.** SMUD entered into an initial two-year contract (with a third year exercisable option) with Calpine Energy Services, L.P. (“Calpine”) for the ability to schedule up to 258 MWs of energy from Sutter Energy Center. The Sutter Energy Center is a natural gas-fired, combined-cycle facility located in Yuba City, California. The initial contract became effective on April 1, 2018. SMUD exercised its option to extend the contract and it expired November 1, 2020. SMUD entered into a new contract with Calpine for the same 258 MWs of energy that became effective January 1, 2021, and had an original expiration date of January 1, 2024. In December 2021, SMUD extended the Sutter Energy Center contract. The contract currently expires December 31, 2026.

**Drew Solar, LLC.** In June 2018, SMUD entered into a 30-year power purchase agreement with Drew Solar, LLC for the purchase of energy from a 100 MW solar PV project located in Imperial County, California. The project’s commercial operation date was set to be December 31, 2021. The scheduled commercial operation date is delayed to June 2022 due to Force Majeure claims surrounding the COVID pandemic and supply chain constraints caused by changes in Federal regulatory requirements.

**Wildflower Solar.** In October 2018, SMUD entered into a 25-year power purchase agreement with Wildflower Solar I, LLC, for the purchase of energy, capacity, and RECs from a 13 MW solar PV project located in Rio Linda, California. The project began commercially operating on December 18, 2020.

**Coyote Creek (Formerly Sacramento Valley Energy Center, LLC.)** In July 2021, SMUD entered into a 30-year power purchase agreement with Sacramento Valley Energy Center, LLC for the purchase of
energy from a 200 MW solar PV and 100 MW four-hour Battery Energy Storage System (“BESS”) capacity project located in Sacramento County, California. The project’s commercial operation date was expected to be December 31, 2023. The scheduled commercial operation date has been delayed to April 2024 as a result of a change in Federal environmental permitting requirements.

**SloughHouse Solar, LLC.** In September 2021, SMUD entered into a 30-year power purchase agreement with SloughHouse Solar, LLC for the purchase of energy from a 50 MW solar PV project located in Sacramento County, California. The project’s commercial operation date is expected to be December 31, 2023.

**Country Acres Solar.** In December 2021, SMUD issued a Request for Offers (“RFO”) seeking qualified Power Purchase Agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD’s North Area transmission system. The project site is located on over 1,000 acres in Placer County near the city of Roseville. SMUD received and is currently evaluating RFO responses. SMUD’s early-stage development efforts are underway to support the start of construction mobilization in the first quarter 2023 with an expected commercial operation date in late 2024.

**McClellan Solar.** In December 2021, SMUD issued a RFO seeking qualified power purchase agreement offers for a utility scale PV with BESS project under development which will interconnect to SMUD’s distribution electric system by tapping into SMUD’s existing 69 kV distribution line. The project site is located on approximately 170 acres, in McClellan Park in Sacramento County. SMUD received and is currently evaluating RFO responses. SMUD’s early-stage development efforts are underway to support the start of construction mobilization in the third quarter of 2023 with an expected commercial operation date in late 2024.

**Geyser Power Company, LLC.** In March 2021, SMUD executed a 10-year power purchase agreement with Geyser Power Company, LLC for 100 MW of capacity from The Geysers geothermal energy plant located in Lake and Sanoma Counties, California. SMUD will start to receive deliveries on January 1, 2023.

**Transmission Service Agreements**

**TANC California-Oregon Transmission Project.** The 340 mile COTP is one part of a three 500-kV line coordinated system known as the California-Oregon Intertie (“COI”). The COTP is allocated one-third of the 4,800 MW capability of the COI system (see related agreements below). TANC is entitled to use 1,390 MW and is obligated to pay approximately 80% of the operating costs of the COTP. SMUD is a member of TANC and a party to Project Agreement No. 3 (“PA3”), under which it is entitled to 378 MW and obligated to pay on an unconditional take-or-pay basis about 27.5% of TANC’s COTP debt service and operations costs, subject to a “step-up” obligation of up to 25% of its entitlement share upon the unremedied default of another TANC member-participant. In 2009, SMUD entered into a long-term layoff agreement with certain members that increased SMUD’s entitlement by 35 MW. In 2014, SMUD entered into another long-term layoff agreement with certain other members that increased SMUD’s COTP entitlements by 128 MW and amended the 2009 layoff agreement that returned 13 MW to a member. As of December 31, 2018, SMUD was entitled to approximately 528 MW of TANC’s transfer capability for imports and 405 MW for exports, and is obligated to pay approximately 38.6% of TANC’s COTP debt service and operations costs. SMUD’s payments under this contract, like SMUD’s payments under its other power purchase and transmission service agreements, are treated as “Maintenance and Operation Costs” or “Energy Payments” under the resolutions securing the Senior Bonds and Subordinated Bonds (each as defined under the caption “CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS” below). SMUD relies on its COTP rights to purchase power, access contingency reserves through the Northwest Power Pool, and obtain renewable resources to supplement its own resources to serve its load.
TANC maintains its own property/casualty insurance program. TANC’s budget for COTP costs, support services and advocacy expenses is about $42.2 million for 2022. SMUD’s obligation of the TANC budget is about $16.1 million for 2022.

**TANC Tesla-Midway Transmission Service.** TANC has a long-term contract with PG&E to provide TANC with 300 MW of transmission service between PG&E’s Midway Substation and the electric systems of the TANC Members (the “Tesla-Midway Service”). SMUD’s share of the Tesla-Midway Service had been 46 MW. As part of the 2009 long-term layoff agreement, SMUD acquired an additional 2 MW of South-of Tesla Principles (“SOTP”) transmission rights for 15 years starting February, 2009 from another TANC member, bringing SMUD’s share of the Tesla-Midway Service to 48 MW.

**Bonneville Power Administration.** In 2009, SMUD entered into a transmission service agreement with the Bonneville Power Administration (“BPA”) for 60 MW of firm point-to-point transmission service from BPA’s Hilltop substation in north eastern California to the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project over BPA’s 230kV transmission lines. In early 2013, in accordance with BPA’s transmission tariff, the transmission service was split into two 30 MW services and deferred as appropriate to better fit the timing of expected commercial operation of the Phase 1 30 MW and Phase 2 30 MW of the Patua project. See “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Patua Project LLC.” SMUD submitted another request for the 30 MW of transmission procured for Patua Phase 2 to split the service into a 10 MW and a 20 MW service, with the 10 MW of service deferred to be timed with the expected commercial operation date of Phase 2. With the termination of Phase 2 and SMUD’s reduced obligation due to the poor performance of Phase 1, much of the transmission reserved for it will no longer be needed. BPA does not have a provision in its transmission tariff for early termination of transmission service. However, the power purchase agreement with Patua requires Patua to cover unused transmission that SMUD has procured for the Patua purchases. On January 1, 2020, SMUD’s transmission rights with BPA were reduced to 19 MW. This now aligns with SMUD’s Pacificorp transmission rights of 19 MW described below.

**Pacificorp.** In 2009, SMUD entered into a transmission service agreement with PacifiCorp for 60 MW of firm point-to-point transmission service across PacifiCorp’s high voltage step-up transformer at the Malin substation at the California-Oregon border for the purpose of transmitting power under SMUD’s power purchase agreement with Gradient Resources for Phase 1 of the Patua geothermal project. In early 2013, in accordance with PacifiCorp’s transmission tariff, the commencement of the 60 MW of transmission service was deferred to fit the timing of first deliveries expected from the 30 MW of Phase 1 of the Patua project. In 2013, SMUD terminated the 60 MW of transmission service and requested two new transmission services of 30 MW each, the start of which is timed to better fit with the expected start dates of phases 1 and 2 of the Patua Project. With the reduction in expected Patua output due to the Patua power purchase agreement fourth amendment, SMUD terminated the second 30 MW transmission agreement, and replaced it with a 10 MW transmission service agreement for Patua Phase 2. With the recent termination of Phase 2 of the Patua Project, SMUD terminated the 10 MW Pacificorp transmission service agreement. As a result of the reduced obligation to take power from the Patua Project, SMUD has reduced its Pacificorp transmission service from 30 MW to 19 MW.

**Western Area Power Administration.** SMUD does not have a direct interconnection of its power system to the COTP. To receive power deliveries that use its COTP rights, SMUD has a long-term transmission service agreement with WAPA for transmission of 342 MW of power from the COTP line (received at WAPA’s Tracy or Olinda substations) to SMUD’s system. In May of 2011, WAPA completed the Sacramento Voltage Support Transmission Project. Completion of this project has given SMUD an additional 165 MW of transmission service rights on WAPA’s system from the COTP at the Olinda Substation to SMUD’s system at the Elverta Substation.
Projected Resources

The following tables titled “Projected Requirements and Resources to Meet Load Requirements Energy Requirements and Resources” (the “Energy Table”) and “Capacity Requirements and Resources Net Capacity – Megawatts” (the “Capacity Table”) describe SMUD’s contracted commitments and owned resources available to meet its forecasted load requirements through the year 2031. Resources are shown on an annualized basis with market purchases netted against surplus sales to arrive at a single net position for each year. Because SMUD’s available resources do not exactly match its actual load requirements on an hourly basis, there are times during a year when resources available will either exceed or be insufficient to meet SMUD’s needs. Expected actual capacity values are included in the tables. These values may differ from measured net demonstrated capacity values of the Local Area Gas-Fired Plants. The table below also includes the impact energy efficiency has on resource requirements as discussed below under “Demand Side Management Programs.” See “BUSINESS STRATEGY” and “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants.”

Resources listed in both the Energy Table and the Capacity Table are listed as either renewable or non-renewable. Generally, SMUD follows the CEC guidelines for eligibility requirements. Some of SMUD’s renewable resources listed include solar, wind, geothermal, small hydroelectric facilities with a capacity of 30 MW or less, and biomass (representing generation from a fuel comprised of agricultural wastes and residues, landscape and tree trimmings, wood and wood waste).

As in any forecast, assumptions are made. In both the Energy Table and the Capacity Table the WAPA and UARP forecasts assume average water conditions throughout the period. On the capacity table, WAPA and SFA renewable capacity is estimated based on the ratio of renewable energy to total WAPA or SFA energy. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Hydroelectric.”

The Uncommitted Purchases (Sales) on the tables represent either anticipated future needs or surpluses. Future needs are met well in advance of delivery. They also include both renewable and non-renewable resources.

The Transmission Losses represent reductions in the amount of energy or capacity from the location it was purchased to the point of entering SMUD’s electrical system. This amount reduces the Total Resources available to meet the Total Projected Energy Requirements of the electrical system.

Demand Side Management Programs

SMUD’s demand-side management initiatives represent an integral element of its total resource portfolio, and are organized into two major components: energy efficiency and load management programs. Energy efficiency offerings include a wide variety of programs and services to customers to retrofit or upgrade existing equipment and fixtures and to install new energy efficiency measures in existing and new construction facilities. Load management allows SMUD to reduce the load on the electric system by cycling residential air conditioning, and calling upon commercial/industrial customers to curtail energy usage when energy is constrained during the summer or system emergencies. Load management programs are projected to allow SMUD to shed approximately 60 MW of peak load in an emergency on a hot day, representing about 2% of SMUD’s maximum system peak demand.

The customer “smart meter” system with 2-way communication capability provides information regarding customer usage patterns, which is expected to help SMUD tailor rate designs that provide customers with both the information and ability to manage their energy usage around high energy cost periods.
PROJECTED REQUIREMENTS AND RESOURCES TO MEET
LOAD REQUIREMENTS(1)
ENERGY REQUIREMENTS AND RESOURCES (GWh)
2022
Renewable Resources
District or Joint Powers Authority Owned:
UARP - Small Hydro(3)
Solano Wind
SFA – Shell Landfill Gas and Digester Gas(2)
Total
Purchases
Western (WAPA) – Small Hydro(3)
Patua (Gradient/Vulcan) – Geothermal
Cal Energy – Geothermal
Iberdrola (PPM) – Wind
Grady – Wind
Recurrent SolarShares
Rancho Seco PV2
Feed-in-Tariff Photovoltaic – Solar
Drew Solar
Sloughhouse Solar
Calpine Geothermal
Wildflower Solar
Planned Solar with Storage
Coyote Creek Solar
Other Long-Term Contracts
Future Variable Renewable Projects
Future Firm Renewable Projects
Total
Non-Renewable
District or Joint Powers Authority Owned:
UARP – Large Hydro(3)
SFA – Cosumnes
CVFA – Carson Ice
SCA – P&G
SPA – McClellan
SPA – Campbell Soup
Total
Purchases
Western (WAPA) – Large Hydro(3)
Western (WAPA) Customers (wheeling)(3)
Calpine Sutter
Total
Total Resources
Uncommitted Purchases / (Sales)
Transmission Losses (COTP/CVP)
Total Projected Energy Requirements
Energy Efficiency (EE) Board Goals
SB1 Photovoltaic Goals
Expected Electric Vehicle (EV) Charging
Electric Building (EB)
Battery Storage (Utility)
Battery Storage (BTM)
Total Gross Energy Requirements
before EE, SB1 and EV Charging
(1)
(2)
(3)

2023

2024

2025

2026

2027

2028

2029

2030

2031

70
584
146
800

89
597
811
1,497

99
777
784
1,660

96
854
767
1,716

103
836
767
1,706

103
836
759
1,698

103
838
761
1,702

104
836
760
1,700

104
836
760
1,701

104
836
760
1,701

10
140
223
95
883
174
311
215
178
--33
--189
--2,451

19
147
223
98
897
171
333
210
301
0
876
31
--180
--3,486

20
147
224
98
900
170
332
209
301
132
878
31
-414
171
--4,027

19
147
223
45
897
171
330
208
298
131
876
31
761
522
160
--4,819

19
147
223
-897
171
328
207
297
130
876
31
757
507
52
756
-5,399

19
147
223
-897
170
327
206
295
130
876
30
753
505
28
867
-5,474

19
147
224
-900
169
325
205
294
129
876
30
749
502
28
1,687
100
6,385

19
147
223
-897
168
323
204
292
128
876
30
745
500
28
1,959
1,040
7,582

19
147
223
-897
167
322
203
291
128
876
30
742
497
28
2,787
1,040
8,397

19
147
223
0
897
167
320
202
289
127
876
30
738
495
28
2,787
1,040
8,385

1,149
3,496
314
726
16
663
6,363

1,481
3,246
357
626
7
389
6,106

1,599
3,136
319
553
2
362
5,970

1,606
3,067
262
524
-179
5,639

1,609
3,082
9
241
--4,941

1,609
2,439
2
133
--4,183

1,609
1,731
-40
--3,380

1,609
1,165
2
2
--2,778

1,609
513
3
1
--2,125

1,609
513
3
1
--2,125

337
20
852

613
36
1,300

641
38
1,141

629
38
1,003

629
38
82

629
38
--

629
38
--

629
38
--

629
38
--

629
38
--

1,209

1,950

1,820

1,670

749

667

667

667

667

667

10,823
(109)
(38)
10,676
109
60
(17)
(9)
---

13,039
(2,391)
(36)
10,612
183
121
(44)
(21)
(1)
--

13,476
(2,816)
(29)
10,632
254
168
(77)
(37)
(1)
--

13,844
(3,200)
(33)
10,611
321
211
(121)
(58)
(1)
(1)

12,795
(2,113)
(31)
10,651
393
763
(182)
(106)
(129)
(2)

12,022
(1,267)
(29)
10,727
448
819
(247)
(144)
(137)
(4)

12,134
(1,289)
(27)
10,819
504
876
(324)
(190)
(177)
(7)

12,726
(1,779)
(25)
10,922
550
931
(408)
(256)
(209)
(11)

12,890
(1,785)
(23)
11,082
581
985
(499)
(345)
(262)
(16)

12,878
(1,607)
(21)
11,250
611
1,036
(600)
(437)
(262)
(20)

10,819

10,852

10,939

10,962

11,388

11,462

11,501

11,520

11,526

11,577

Totals may not sum due to rounding.
Includes a biomethane contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas
Supply”).
2022 based on current precipitation levels as of March 31, 2022. All other years assume average precipitation.

A-40
4139-3939-8711.3


**CAPACITY REQUIREMENTS AND RESOURCES**

**NET CAPACITY – MEGAWATTS**

<table>
<thead>
<tr>
<th>Load:</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Peak</td>
<td>2,874</td>
<td>2,863</td>
<td>2,853</td>
<td>2,844</td>
<td>2,878</td>
<td>2,882</td>
<td>2,888</td>
<td>2,907</td>
<td>2,929</td>
<td>2,952</td>
</tr>
<tr>
<td>Transmission Losses</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Dispatchable Demand Resource</td>
<td>(71)</td>
<td>(71)</td>
<td>(71)</td>
<td>(71)</td>
<td>(146)</td>
<td>(165)</td>
<td>(183)</td>
<td>(202)</td>
<td>(165)</td>
<td>(165)</td>
</tr>
<tr>
<td>Adjusted Peak</td>
<td>2,831</td>
<td>2,820</td>
<td>2,810</td>
<td>2,801</td>
<td>2,760</td>
<td>2,745</td>
<td>2,733</td>
<td>2,733</td>
<td>2,792</td>
<td>2,815</td>
</tr>
<tr>
<td>15% Reserve Margin</td>
<td>425</td>
<td>423</td>
<td>421</td>
<td>420</td>
<td>414</td>
<td>412</td>
<td>410</td>
<td>410</td>
<td>419</td>
<td>422</td>
</tr>
<tr>
<td>Adjusted Peak with Reserves</td>
<td>3,255</td>
<td>3,244</td>
<td>3,231</td>
<td>3,221</td>
<td>3,174</td>
<td>3,143</td>
<td>3,143</td>
<td>3,210</td>
<td>3,237</td>
<td></td>
</tr>
</tbody>
</table>

### Renewable Resources

**District or Joint Powers Authority Owned:**

- **UARP – Small Hydro**
  - 45 45 45 45 45 45 45 45 45 45
- **Solano Wind**
  - 120 98 117 163 46 39 37 38 34 31
- **SFA – Shell Landfill Gas and Digester Gas**
  - 29 114 114 114 120 120 120 120 120 120
- **Total**
  - 193 256 276 322 211 204 202 202 199 196

**Purchases**

- **Western (WAPA) – Small Hydro**
  - 8 10 10 9 10 10 10 10 10 10 10
- **Iberdrola (PPM) – Wind**
  - 32 15 7 -- -- -- -- -- -- -- --
- **Grady – Wind**
  - 45 32 27 24 54 60 55 55 55 56 56
- **Pattu (Gradient/Vulcan) – Geothermal**
  - 12 12 12 12 12 12 12 12 12 12 12
- **Calfego – Geothermal**
  - 26 26 26 26 26 26 26 26 26 26 26
- **Geyser – Geothermal**
  - 95 95 95 95 95 95 95 95 95 95 95
- **Recurent Solar**
  - 39 6 5 3 2 2 3 2 2 2 2
- **RanchoSeco – Solar**
  - 73 64 25 20 4 3 3 3 3 3 3 3 3
- **Coyote Creek Solar**
  - -- -- 140 124 29 23 17 13 11 13 11 13
- **Sloughhouse Solar**
  - -- -- 11 0 2 2 2 1 2 1 2 1
- **NTUA Navajo Drew Solar**
  - 56 32 12 14 12 12 10 10 10 8 8 8
- **Feed-in-Tariff Photovoltaic – Solar**
  - 27 23 2 3 3 4 3 3 3 3 3
- **Planned Solar with Storage**
  - -- -- -- 196 64 54 30 21 16 19
- **Generic Storage**
  - -- -- -- -- 362 387 442 444 422 407
- **Future Variable Renewable Projects**
  - -- -- -- -- 51 51 139 144 150 150
- **Future Firm Renewable Projects**
  - -- -- -- -- 12 125 125 125 125 125
- **Other Long-Term Contracts**
  - 28 26 27 29 3 3 3 3 3 3 3
- **ELCC Portfolio Benefit**
  - (53) 96 218 (35) 494 484 481 488 540 497 540
- **Total**
  - 292 436 617 519 1,221 1,228 1,342 1,455 1,483 1,436 1,436

**Non-Renewable**

**District or Joint Powers Authority Owned:**

- **UARP – Large Hydro**
  - 640 640 640 640 640 640 640 640 640 640 640
- **SFA (Cosumnes)**
  - 542 456 456 456 456 456 456 456 456 456 456
- **CVFA (Carson-Ice)**
  - 103 103 103 103 103 100 100 100 100 100 100
- **SCA (Procter & Gamble)**
  - 166 166 166 166 166 166 166 166 166 166 166
- **SPA (McClellan)**
  - 72 72 72 2 -- -- -- -- -- -- --
- **SPA (Camell)l**
  - 170 170 170 170 -- -- -- -- -- -- --
- **Hedge Battery**
  - 4 4 4 4 4 4 4 4 4 4 4 4 4 4
- **Total**
  - 1,697 1,611 1,611 1,539 1,369 1,366 1,366 1,300 1,300 1,300 1,300

**Purchases**

- **Western (WAPA) – Large Hydro**
  - 250 309 309 303 303 303 303 303 303 303 303 303
- **Western (WAPA) Customers**
  - 15 18 18 18 18 18 18 18 18 18 18 18 18
- **Sutter Energy Center**
  - 258 258 258 258 258 258 258 258 258 258 258 258 258
- **Firm Contract Reserves**
  - 14 17 17 17 17 17 17 17 17 17 17 17 17
- **Committed Purchases**
  - 450 250 -- -- -- -- -- -- -- -- -- --
- **Total**
  - 986 852 602 596 596 596 596 596 596 596 596
- **Uncommitted Purchases / (Sales)**
  - 88 88 126 126 126 126 126 126 126 126 126 126 126
- **Total Resources**

---

(1) Based on information available as of March 31, 2022. Totals may not sum due to rounding. Capacity values for wind, solar, storage, and future variable renewable projects shown are based on resource effective load carrying capability (ELCC) modeling.

(2) The SFA Project is a 495 MW plant that includes 100 MW capacity attributable to a biogas contract counted as renewable (see “POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply”) and 395 MW capacity from natural gas.

(3) SMUD assumes that for all firm system purchases, the suppliers will be planning 5% reserves.
Balancing Authority Area Agreements

Background. SMUD began operating as an independent control area, later termed a Balancing Authority, on June 18, 2002 within the WECC reliability organization’s region. This reduced SMUD’s exposure to the costs and reliability risks of the CAISO’s markets. SMUD expanded its operational footprint beyond SMUD’s service territory to include WAPA’s electric system, including the MID, Roseville, and Redding service areas (on January 1, 2005) and the COTP (on December 1, 2005). As described further below, SMUD ceased to be the Balancing Authority on April 30, 2011, as BANC took SMUD’s place as the Balancing Authority. SMUD remains the operator of the Balancing Authority through a contract with BANC. SMUD administers the contracts with WAPA and TANC to provide specified Balancing Authority-related and other services, and is compensated by WAPA and TANC for its added labor expense. TANC recovers such Balancing Authority services costs as a part of its annual operating budget from the COTP Participants and WAPA recovers its Balancing Authority services costs through its rates for power and transmission service. The agreement with WAPA, among other terms, establishes operating reserve obligations between the parties. WAPA in turn has agreements with electric systems connected to it to assure that such systems also operate reliably (i.e., MID, Roseville and Redding). As a result of the transition to BANC as the Balancing Authority, SMUD assigned or terminated its interconnection and operations agreements with other interconnecting Balancing Authority areas (i.e., CAISO, BPA and TID). BANC is now the party to these agreements as they primarily address only Balancing Authority matters required for compliance with the reliability standards issued by the North American Electric Reliability Corporation (“NERC”), such as emergency assistance arrangements. See also “OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY – Energy Imbalance Market.”

Reliability Standards. The Energy Policy Act of 2005 gave FERC authority to enforce reliability standards for the bulk electric system. In June 2007, these standards became mandatory for SMUD and BANC. In late 2019, SMUD and BANC underwent a combined NERC/WECC audit to evaluate compliance with applicable reliability standards. These audits occur every three years. At the conclusion of the audit, regulators determined that neither entity had any compliance violations related to the Operations and Planning or Critical Infrastructure Protection Standards. Resolutions to minor recommendations and areas of concern were completed in 2020. SMUD and BANC will undergo another NERC/WECC audit sometime in 2022.

Balancing Authority of Northern California. SMUD, MID, Redding and Roseville executed a Joint Exercise of Powers Agreement (the “BANC JPA Agreement”) creating BANC on May 8, 2009. BANC became operational on May 1, 2011 as a Balancing Authority and replaced SMUD as the entity responsible for Balancing Authority-related reliability standards. Since that time, the Trinity Public Utilities District and the City of Shasta Lake have also become members of BANC. As provided in the BANC member agreement, liability for penalties associated with such Balancing Authority-related reliability standards are shared on a pro rata basis among the members of BANC. SMUD is the Balancing Authority operator under contract and performs Balancing Authority operational functions on behalf of BANC, much as it did when it was the Balancing Authority. The BANC JPA Agreement assigns cost responsibility based on member load within the BANC Balancing Authority, with SMUD representing approximately 70% of the total load.

Power Pool and Other Agreements

Northwest Power Pool Agreement. The Northwest Power Pool (“NWPP”) is an agreement among over 30 utilities and public agencies in the western United States to coordinate contingency reserve sharing, referred to as the NWPP Reserve Sharing Program (“RSP”). The RSP permits participants to rely on one
another in the event that any participant experiences a generating resource outage. While SMUD became an RSP participant in 2009, participation is limited to Balancing Authorities, which SMUD relinquished to BANC in 2011. Under the RSP, BANC and TID (also a NWPP member) share their reserve amounts and when necessary may call upon NWPP reserves using BANC member systems and unused COTP rights. The NWPP RSP permits members to operate more efficiently by reducing the contingency reserves that they would otherwise need to have available if they could not rely on each other.

**TANC-SMUD OASIS Administration Agreement.** SMUD entered into an agreement with TANC to provide OASIS services (transmission sales and scheduling related services in the BANC BA of TANC members’ COTP rights) on September 29, 2005. SMUD is compensated for performing these services. TANC and SMUD entered into a letter agreement dated October 25, 2010 to clarify each party’s role for regulatory reliability standards compliance responsibilities and take into account SMUD’s increased efforts related to supporting TANC’s compliance requirements. TANC includes the costs of this service in its annual budgets and recovers the costs from its members who use the TANC OASIS to make their COTP transmission available to third parties.

**Other Agreements with PG&E**

**Background.** SMUD’s electric system was originally purchased from PG&E in 1947. SMUD’s service area is mostly surrounded by PG&E’s service area and the two electric systems are interconnected at SMUD’s Rancho Seco and Lake 230-kV substations.

**Interconnection Agreement.** PG&E and SMUD executed a Replacement Interconnection Agreement ("RIA") which became effective on January 1, 2010. The RIA provides that SMUD and PG&E operate their interconnections reliably, plan their electric systems to meet their load requirements, and avoid or mitigate impacts they cause by certain electric system modifications. The new agreement has a termination date of December 31, 2024, subject to FERC approval.

**Generator Interconnection Agreements.** SMUD signed a Large Generator Interconnection Agreement with CAISO and PG&E for the Solano 3 Wind Project, effective December 16, 2008, with a 50-year term. The Solano Wind Project Phase 1 has interconnection rights granted through a Small Generator Interconnection Agreement with the CAISO and PG&E and the Solano Wind Project Phase 2 has interconnection rights granted through a Large Generator Interconnection Agreement, also with the CAISO and PG&E. Both agreements became effective in January 2010 and both have terms of 20 years. SMUD entered into a Large Generator Interconnection Agreement with the CAISO and PG&E on June 3, 2021 for the planned 90.8 MW Solano 4 Wind project.

Other generator interconnection agreements include a Small Generator Interconnection Agreement with PG&E for Slab Creek with a 22-year term which became effective on January 14, 2010, and a Small Generator Interconnection Agreement with PG&E for the Chili Bar Project with a 10-year term which became effective on June 2, 2021.
SELECTED OPERATING DATA

Selected operating data of SMUD for the four years ended December 31, 2018 through 2021 are presented in the following table.

SMUD SELECTED OPERATING DATA
CUSTOMERS, SALES, SOURCES OF ENERGY AND REVENUES

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customers at End of Period:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>572,786</td>
<td>568,741</td>
<td>565,103</td>
<td>559,907</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>69,426</td>
<td>68,628</td>
<td>68,203</td>
<td>67,782</td>
</tr>
<tr>
<td>Other</td>
<td>7,345</td>
<td>7,354</td>
<td>7,406</td>
<td>7,448</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>649,557</td>
<td>644,723</td>
<td>640,712</td>
<td>635,137</td>
</tr>
<tr>
<td><strong>MWh Sales:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>4,749,079</td>
<td>4,906,566</td>
<td>4,493,548</td>
<td>4,515,031</td>
</tr>
<tr>
<td>Commercial and industrial</td>
<td>5,649,474</td>
<td>5,453,120</td>
<td>5,616,920</td>
<td>5,661,449</td>
</tr>
<tr>
<td>Other</td>
<td>54,473</td>
<td>55,590</td>
<td>55,770</td>
<td>57,031</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>10,453,026</td>
<td>10,415,276</td>
<td>10,166,238</td>
<td>10,233,511</td>
</tr>
<tr>
<td>Surplus power/out of area sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,227,933</td>
<td>12,675,267</td>
<td>12,044,443</td>
<td>11,749,800</td>
</tr>
<tr>
<td><strong>Sources of Energy Sold MWh:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generated by SMUD</td>
<td>6,776,244</td>
<td>6,414,380</td>
<td>7,143,944</td>
<td>7,089,430</td>
</tr>
<tr>
<td>Purchased or exchanged</td>
<td>6,884,003</td>
<td>6,691,279</td>
<td>5,324,217</td>
<td>5,078,432</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,660,247</td>
<td>13,105,659</td>
<td>12,468,161</td>
<td>12,167,862</td>
</tr>
<tr>
<td>Less System losses and SMUD usage</td>
<td>432,314</td>
<td>430,392</td>
<td>423,718</td>
<td>418,062</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,227,933</td>
<td>12,675,267</td>
<td>12,044,443</td>
<td>11,749,800</td>
</tr>
<tr>
<td><strong>Gross System peak demand (kW)(1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average kWh sales per residential customer(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential(2) (cents)</td>
<td>8,316</td>
<td>8,650</td>
<td>7,987</td>
<td>8,101</td>
</tr>
<tr>
<td>Commercial &amp; industrial(2) (cents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Source:** SMUD

(1) Peak system MW values are measured at the four SMUD interconnection points and exclude SMUD’s generation losses. Historical values include the impacts of dispatchable, non-dispatchable, and energy efficiency program capacity savings.

(2) The average kWh sales per residential customer and the average revenue per kWh sold are calculated based upon billed and unbilled sales.

SELECTED FINANCIAL DATA

SMUD Financial Information

The following table presents selected financial data of SMUD. Under generally accepted accounting principles, data with respect to SMUD’s component units, such as the Authorities, is included with that of SMUD. The following presents data for SMUD only and not its component units, such as the Authorities. SMUD’s audited financial statements for the years ended December 31, 2021, and December 31, 2020, are included in APPENDIX B attached to this Official Statement. The following unaudited data for SMUD (excluding its component units) is drawn from SMUD’s financial records that have been subjected to the auditing procedures applied in the audits of SMUD’s and its component units’ financial statements for the years ended December 31, 2018 through 2021.
**SMUD FINANCIAL DATA**

*(thousands of dollars)*

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018 (restated)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary of Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Revenues(2)</td>
<td>$1,784,313</td>
<td>$1,582,979</td>
<td>$1,553,167</td>
<td>$1,589,612</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>(1,463,138)</td>
<td>(1,397,845)</td>
<td>(1,412,199)</td>
<td>(1,376,987)</td>
</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>321,175</td>
<td>185,134</td>
<td>140,968</td>
<td>212,625</td>
</tr>
<tr>
<td>Interest and Other Income (Expense)</td>
<td>108,564</td>
<td>63,014</td>
<td>(21,113)</td>
<td>76,966</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>(81,692)</td>
<td>(80,699)</td>
<td>(66,185)</td>
<td>(73,021)</td>
</tr>
<tr>
<td>Change in Net Position</td>
<td>$348,047</td>
<td>$167,449</td>
<td>$53,670</td>
<td>$216,570</td>
</tr>
</tbody>
</table>

**Selected Statement of Net Position Information**

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Plant in Service</td>
<td>$3,448,439</td>
<td>$3,234,208</td>
<td>$3,187,135</td>
<td>$2,995,505</td>
</tr>
<tr>
<td>Construction Work in Progress</td>
<td>365,478</td>
<td>460,155</td>
<td>351,584</td>
<td>396,794</td>
</tr>
<tr>
<td>Electric Utility Plant – Net</td>
<td>$3,813,917</td>
<td>$3,694,363</td>
<td>$3,538,719</td>
<td>$3,392,299</td>
</tr>
<tr>
<td>Unrestricted Cash</td>
<td>$569,001</td>
<td>$662,155</td>
<td>$451,800</td>
<td>$434,103</td>
</tr>
<tr>
<td>Rate Stabilization Fund</td>
<td>$188,992</td>
<td>$168,726</td>
<td>$143,669</td>
<td>$96,694</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$6,020,991</td>
<td>$5,826,449</td>
<td>$5,429,137</td>
<td>$5,254,839</td>
</tr>
<tr>
<td>Net Position</td>
<td>$2,292,640</td>
<td>$1,944,363</td>
<td>$1,777,145</td>
<td>$1,723,476</td>
</tr>
<tr>
<td>Long-Term Debt(3)</td>
<td>$2,387,686</td>
<td>$2,523,921</td>
<td>$2,166,389</td>
<td>$1,803,840</td>
</tr>
</tbody>
</table>

**Debt Service Coverage Ratios**

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parity Debt Service Coverage Ratio</td>
<td>2.59x</td>
<td>2.25x</td>
<td>2.11x</td>
<td>2.37x</td>
</tr>
<tr>
<td>Parity and Subordinate Debt Service Coverage Ratio</td>
<td>2.47x</td>
<td>2.14x</td>
<td>2.06x</td>
<td>2.37x</td>
</tr>
</tbody>
</table>

---

(1) The financial statements of SMUD comprise financial information of SMUD along with its component units, CVFA, SPA, SCA, SFA, NCGA and NCEA. This table includes only financial information of SMUD excluding its component units. Net operating revenues and expenses and Electric Utility Plant and Capitalization of CVFA, SPA, SCA, SFA, NCGA and NCEA are not included in this table, although amounts paid to or received from the Authorities by SMUD are included.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund for each full year as follows:

- 2021 $20.3 million
- 2020 $25.1 million
- 2019 $47.0 million
- 2018 ($3.2 million)

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

[Remainder of Page Intentionally Left Blank]
Financial Information of SMUD and the Authorities

The following table presents a summary of selected financial information for SMUD and the Authorities.

| SUMMARY OF FINANCIAL INFORMATION OF SMUD AND THE AUTHORITIES FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (thousands of dollars) |
|---|---|---|
| | Year Ended December 31, 2021 | Year Ended December 31, 2020 |
| **SMUD** | **Authorities** | **Total**<sup>(1)</sup> | **SMUD** | **Authorities** | **Total**<sup>(1)</sup> |
| Operating Revenues<sup>(2)</sup> | $1,784,313 | $270,694 | $1,790,568 | $1,582,979 | $267,211 | $1,587,905 |
| Operating Expenses | (1,463,138) | (250,952) | (1,449,651) | (1,397,845) | (252,832) | (1,387,692) |
| Operating Income | 321,175 | 19,742 | 340,917 | 185,134 | 14,379 | 199,513 |
| Interest and Other Income | 108,564 | 790 | 107,968 | 63,014 | 1,605 | 63,022 |
| Interest Expense | (81,692) | (27,608) | (109,300) | (80,699) | (28,601) | (109,300) |
| Change in Net Position | $348,047 | $(7,076) | $339,585 | $167,449 | $(12,617) | $153,235 |

**Selected Statement of Net Position Information**

<table>
<thead>
<tr>
<th></th>
<th><strong>SMUD</strong></th>
<th><strong>Authorities</strong></th>
<th><strong>Total</strong>&lt;sup&gt;(1)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Plant in Service</td>
<td>$3,448,439</td>
<td>$301,773</td>
<td>$3,747,212</td>
</tr>
<tr>
<td>Construction Work in Progress</td>
<td>365,478</td>
<td>1,819</td>
<td>367,297</td>
</tr>
<tr>
<td>Electric Utility Plant – Net</td>
<td>$3,813,917</td>
<td>$303,592</td>
<td>$3,834,970</td>
</tr>
<tr>
<td>Unrestricted Cash</td>
<td>$569,001</td>
<td>$61,375</td>
<td>$630,376</td>
</tr>
<tr>
<td>Rate Stabilization Fund</td>
<td>$188,992</td>
<td>--</td>
<td>$188,992</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$6,020,991</td>
<td>$1,173,867</td>
<td>$6,195,858</td>
</tr>
<tr>
<td>Net Position</td>
<td>$2,292,640</td>
<td>$286,996</td>
<td>$2,579,636</td>
</tr>
<tr>
<td>Long-Term Debt&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>$2,387,686</td>
<td>$826,171</td>
<td>$3,213,857</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Financial information for SMUD and the SMUD JPAs (CVFA, SPA, SCA, SFA, NCGA and NCEA) include intercompany balances. The financial information reflects balances after the elimination of intercompany accounts including Authorities distributions to SMUD of $1.4 million in 2021 and $1.6 million in 2020.

<sup>(2)</sup> Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund as follows:
- 2021: $20.3 million
- 2020: $25.1 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See “RATES AND CUSTOMER BASE – Rates and Charges” above.

<sup>(3)</sup> Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

[Remainder of Page Intentionally Left Blank]
Management’s Discussion of SMUD’s Operating Results

Year Ended December 31, 2021. For the year ended December 31, 2021, SMUD reported an increase in net position of $348.0 million as compared to an increase of $167.4 million for 2020.

Operating revenues were $201.3 million higher than 2020. This was primarily due to higher sales to customers ($70.1 million), sales of surplus gas ($65.4 million), sales of surplus power ($47.1 million), transfers from the RSF ($18.2 million), AB 32 revenue ($17.9 million) and gain on sale of carbon allowance futures ($3.1 million), partially offset by transfers to the RSF ($13.4 million) and lower public good revenue ($3.5 million).

Operating expenses were $65.3 million higher than 2020. This was primarily due to higher production operating expenses ($89.6 million), purchased power expenses ($71.8 million), and depreciation expenses ($11.9 million), partially offset by lower amortization of pension and OPEB ($84.2 million), public good expenses ($10.7 million), customer accounts expenses ($6.8 million) and transmission and distribution maintenance expenses ($5.5 million).

Non-Operating income increased by $45.5 million primarily due to California Arrearage Payment Program funding ($41.4 million), a settlement related to Rancho Seco damages ($15.0 million), higher investment income ($11.5 million), higher contributions in aid of construction ($4.0 million), offset by dissolution of RBC CSCDA gas prepay contract ($10.9 million), lower insurance proceeds ($8.6 million), lower interest income ($7.3 million), lower unrealized holding gains ($4.0), lower distributions from the JPAs ($2.6 million) and lower legal settlement costs ($2.2 million).

Interest expense increased $1.0 million from 2020.

Year Ended December 31, 2020. For the year ended December 31, 2020, SMUD reported an increase in net position of $167.4 million as compared to an increase of $53.7 million for 2019.

Operating revenues were $29.8 million higher than 2019. This was primarily due to higher sales to customers ($42.8 million), transfers from the RSF ($23.1 million), sales of surplus power ($22.3 million), LCFS credit sales revenue ($5.9 million) and other electric revenue ($3.7 million), partially offset by lower sales of surplus gas ($32.7 million), AB 32 revenue ($26.9 million), miscellaneous service revenue ($5.4 million) and customer late fee revenue ($2.3 million).

Operating expenses were $14.4 million lower than 2019. This was primarily due to lower production operating expenses ($42.5 million), administrative and general expenses ($17.4 million), public good expenses ($6.4 million), depletion expense ($4.1 million), production maintenance expenses ($4.1 million) and transmission and distribution operating expenses ($3.0 million), partially offset by higher purchased power expenses ($21.4 million), transmission and distribution maintenance expenses ($17.7 million), depreciation expenses ($14.8 million) and amortization of regulatory assets ($8.7 million).

Non-Operating income increased by $84.1 million due to no divestment of its interests in the Rosa Unit ($52.1 million), lower write-off of preliminary projects in 2020 ($11.6 million), dissolution of RBC CSCDA gas prepay contract ($10.9 million), higher insurance proceeds ($8.3 million), higher distributions from the JPAs ($4.0 million) and lower CCA costs net of higher revenues ($2.8 million), partially offset by lower contributions in aid of construction ($2.7 million) and lower unrealized holding gains ($2.4 million).

Interest expense increased $14.5 million from 2019.
**Regulatory Assets.** In accordance with Governmental Accounting Standards Board (“GASB”) No. 62, “Regulated Operations,” SMUD defers, as regulatory assets, certain types of expenditures. These assets are amortized and collected through future rates.

As of December 31, 2021, SMUD had a total of $703.7 million recorded for regulatory assets. Regulatory assets associated with costs related to implementation of GASB No. 68 which requires SMUD to record a net pension liability was $357.6 million at December 31, 2021. Regulatory assets associated with costs related to implementation of GASB No. 75 which requires SMUD to record a net Other Post Employment Benefit (OPEB) liability was $293.8 million at December 31, 2021. Regulatory assets associated with Rancho Seco decommissioning costs totaled $83.8 million at December 31, 2021. Nuclear fuel storage costs and non-radiological decommissioning costs have been collected in rates since 2009. For a complete description of these regulatory assets, see Note 8 (Regulatory Deferrals) to SMUD’s financial statements.

The Board has authorized the deferral of any charges or credits that result from the change in valuation of ineffective hedges that should be reported as Investment Revenue/Expense on the Statements of Revenues, Expenses and changes in net position. The Board’s resolution establishes that such charges or credits are not included in rates based on market value changes but are included in rates when the underlying transactions occur. Therefore, under GASB No. 62, “Regulated Operations,” any such changes are included in the Statement of Net Position as regulatory assets or liabilities. For a complete description of these derivative financial instruments, see Note 9 (Derivative Financial Instruments) to SMUD’s financial statements.

**RANCHO SECO DECOMMISSIONING**

**Overview.** The 913 MW Rancho Seco Nuclear Power Plant (“Rancho Seco”) began Nuclear Regulatory Commission (“NRC”) licensed operations in 1974. In June 1989, the electorate of SMUD voted against allowing SMUD to continue to operate Rancho Seco as a nuclear generating facility, and the plant was shut down. In 1991, SMUD submitted a report (the “Financial Assurance Plan”) providing required financial assurance to the NRC that SMUD will have sufficient funds available to pay for the cost of decommissioning. On March 17, 1992, the NRC granted SMUD a change from an operating to a possession-only license for Rancho Seco that relieved SMUD from compliance with a number of NRC regulations applicable to operating nuclear power plants. SMUD also filed a proposed decommissioning plan with the NRC (the “Decommissioning Plan”), which was approved in March 1995.

After the decommissioning efforts began, no suitable disposal option was available to SMUD for the Class B and Class C low level radioactive waste generated during the plant decommissioning. With the used nuclear fuel stored onsite requiring oversight staff, SMUD opted to store the Class B and Class C radioactive waste in an existing interim onsite storage building until a suitable disposal option was available. In November 2007, the possession-only license for Rancho Seco was amended to update the Decommissioning Plan to terminate the possession-only license for the Class B and Class C waste in two phases. Phase I of the decommissioning was completed at the end of 2008. Following verification of the site conditions, SMUD submitted a request to the NRC to reduce the licensed facility from 2,480 acres to the interim onsite storage building and about one acre surrounding it. The request was approved by the NRC in September 2009. Phase II of decommissioning included approximately the two-acre interim storage building containing the Class B and Class C radioactive waste and surrounding area. In September 2013, SMUD entered into a contract with the operator of the low-level radioactive waste disposal facility located in Andrews, Texas. Shipment of the Class B and Class C radioactive waste for disposal was completed in November 2014. SMUD conducted additional clean-up activities and radiological surveys, which were followed by NRC confirmatory surveys. The results of these surveys demonstrated unit dose criteria well below NRC release criteria, and the NRC approved the Phase II area for unrestricted use. On
September 21, 2017, SMUD formally requested the termination of the possession-only license. On August 31, 2018, the NRC officially terminated SMUD’s possession-only license for the remaining Class B and Class C waste at Rancho Seco.

As part of the Decommissioning Plan, the nuclear fuel and Greater Than Class C (“GTCC”) radioactive waste is being stored in a dry storage facility (the Independent Spent Fuel Storage Installation or “ISFSI”) constructed by SMUD, adjacent to the former reactor facility. The NRC has separately licensed this facility. The DOE, under the Nuclear Waste Policy Act of 1982, is responsible for permanent disposal of used nuclear fuel and GTCC radioactive waste. SMUD has a contract with the DOE for the removal and disposal of this waste. The DOE was to have a waste repository operating by 1998, but has experienced significant and ongoing delays. The Nuclear Waste Policy Act designates Yucca Mountain in Nevada as the final and exclusive repository for the nation’s used nuclear fuel. The DOE discontinued the Yucca Mountain license review activities in 2010, but after a court ordered the NRC to resume its review in 2013, the NRC published its final safety evaluation report in 2015. The final safety report, and the final environmental impact statement, concluded that the proposed repository would be safe and environmentally sound for one million years.

Nevertheless, seeking alternatives to Yucca Mountain, the Blue Ribbon Commission on America’s Nuclear Future delivered its final report in January 2012 with several recommendations. The Department of Energy (the “DOE”) responded to the recommendations by issuing a report in January 2013 (Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste). Key to both documents is a focus on used fuel from decommissioned sites including Rancho Seco. The DOE report accepts most of the Blue Ribbon Commission recommendations, and contains timelines for fuel management options which proposed removing the fuel from Rancho Seco as early as 2021. However, any progress on the strategies proposed by the DOE is dependent on legislative action by Congress. With no legislative action taken to date, the 2021 projected date for fuel removal slips year-for-year. Therefore, SMUD cannot determine at this time when the DOE will fulfill its contractual obligations to remove the nuclear fuel and GTCC waste from the Rancho Seco facility. In the meantime, SMUD continues to incur costs of approximately $5 to $6 million per year for storage of used nuclear fuel at the ISFSI. SMUD has filed a series of successful lawsuits against the federal government for recovery of past spent fuel costs, with recoveries to date from the DOE in excess of $104 million. SMUD plans to continue pursuing cost recovery claims to ensure it is reimbursed for all such costs in the future. The ISFSI will be decommissioned and its license terminated after the fuel and GTCC is removed.

Financial Assurance Plan. In accordance with the Financial Assurance Plan, SMUD established and funded an external decommissioning trust fund currently held by Wells Fargo Bank (the “Decommissioning Trust Fund”). Pursuant to the Financial Assurance Plan, SMUD made the final deposit into the Decommissioning Trust Fund in 2008. Additional deposits are not expected but will be made if increased cost estimates or reduced fund interest earnings require it. In 2011, the NRC began requiring that SMUD demonstrate financial assurance for decommissioning the ISFSI as well as the former power facility, increasing the overall cost for decommissioning Rancho Seco. The estimated total cost for decommissioning the ISFSI was approximately $5.7 million at December 31, 2019. The decommissioning cost estimate is required to be updated every three years. As of December 31, 2021, the balance of the Decommissioning Trust Fund was $8.87 million, excluding unrealized gains and losses. Based on the current decommissioning cost estimate and the value of the fund, SMUD’s existing Decommissioning Trust Fund provides sufficient funds to complete decommissioning and terminate the ISFSI license.

In addition to these costs, SMUD also estimates that it would cost approximately $13.1 million to restore the site to make it available for other SMUD uses with some major structures remaining intact. Site restoration is not a legal requirement. No site restoration is currently underway.
EMPLOYEE RELATIONS

SMUD has approximately 2,231 employees, most of whom are covered by a civil service system. SMUD is a contracting member of the California Public Employees’ Retirement System (“PERS”). Approximately 50% of SMUD’s work-force is represented as to wages, hours and other terms and conditions of employment, by one of three recognized employee organizations, the International Brotherhood of Electrical Workers (“IBEW”) Local 1245, the Organization of SMUD Employees (“OSE”), and the SMUD Public Safety Officers’ Association (“PSOA”). The remaining 50% of SMUD’s work-force, which includes managers, professional, administrative, supervisory, confidential and security staff, is unrepresented.

SMUD negotiated four-year Memoranda of Understanding (“MOU”) with IBEW and the OSE, effective January 1, 2022, through December 31, 2025. Both contracts contain a no-strike/no-lockout clause effective during the life of the agreements. The PSOA recently obtained recognition status in 2018, and in 2019, SMUD negotiated an MOU with PSOA effective through December 31, 2022. SMUD expects to begin negotiations with PSOA prior to the expiration of the PSOA MOU. SMUD has experienced only one labor interruption, which occurred in January 1980 that lasted four days.

RETIREMENT BENEFITS AND POST-EMPLOYMENT MEDICAL BENEFITS

Pension Plans

SMUD participates in PERS, an agent multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. Benefit provisions and all other requirements are established by State statute and SMUD policies. The pension plan provides retirement benefits, survivor benefits, and death and disability benefits based upon employees’ years of credited service, age, and final compensation.

As of June 30, 2020, the last actuarial valuation date for SMUD’s plan within PERS, the market value of the SMUD plan assets was $1.94 billion. The plan is 79.1% funded on a market value of assets basis, an increase of 0.7% compared to the June 30, 2019 funded status based on the market value of assets.

As an employer, SMUD is required to contribute a percentage of payroll each year to PERS to fund SMUD’s plan based on actuarial valuations performed by PERS. PERS collects the normal cost based on a percentage of payroll and the unfunded liability portion is based on a dollar amount. SMUD also makes partial contributions required of SMUD employees on their behalf and for their account. At the PERS fiscal year ended June 30, 2021, SMUD’s required employer contribution rate for normal cost was 9.1% of payroll and the unfunded liability contribution was $33.5 million. During 2021, SMUD contributed $57.6 million to PERS (including SMUD’s contributions to cover required employee contributions), and SMUD employees paid $15.4 million for their share of the PERS contribution.

For the fiscal years ending June 30, 2022 and June 30, 2023, SMUD is required to contribute 9.0% and 8.9% of payroll for normal costs and $36.3 million and $22.4 million for the unfunded liability contribution, respectively. Assuming no amendments to the plan and no liability gains or losses (which can have a significant impact), PERS has projected that SMUD will be required to contribute 8.7% of payroll to the plan for normal costs and $23.8 million for the unfunded liability contribution for the fiscal year ending June 30, 2024, not including SMUD contributions to cover required employee contributions. The amount SMUD is required to contribute to PERS is expected to increase in the future. The actual amount
of such increases will depend on a variety of factors, including but not limited to investment returns, actuarial methods and assumptions, experience and retirement benefit adjustments.

SMUD has the option to prepay an annual lump sum payment to PERS for the unfunded accrued liability portion only (not including SMUD contributions to cover required employee contributions). SMUD made an annual lump sum prepayment of $31.3 million, and also voluntarily made an additional payment of $175.1 million, for the unfunded accrued liability for the fiscal year ended June 30, 2021. SMUD also made an annual lump sum prepayment of $35.0 million, and voluntarily made an additional payment of $25.0 million for the unfunded accrued liability for the fiscal year ending June 30, 2022.

While SMUD has some ability to adjust the retirement benefits provided to its employees, PERS determines the actuarial methods and assumptions used with respect to assets administered by PERS (including the SMUD plan assets) and makes the investment decisions with respect to such assets. For a description of such actuarial methods and assumptions (including the smoothing conventions used by PERS when setting employer contribution rates) and investments, see the comprehensive annual financial report of PERS (SMUD’s plan is part of the Public Employees’ Retirement Fund of PERS) available on its website at www.calpers.ca.gov. SMUD cannot guarantee the accuracy of such information and neither the comprehensive annual financial report of PERS nor any other information contained on the PERS website is incorporated by reference in or part of this Official Statement. Actuarial assessments are “forward-looking” information that reflect the judgment of the fiduciaries of the pension plans, and are based upon a variety of assumptions, one or more of which may prove to be inaccurate or be changed in the future. Actuarial assessments will change with the future experience of the pension plans.

GASB issued statement No. 68 “Accounting and Financial Reporting for Pensions – An Amendment of GASB Statement No. 27” (“GASB No. 68”). The primary objective of GASB No. 68 is to improve accounting and financial reporting by state and local governments for pensions. Under GASB No. 68, SMUD is required to report the net pension liability (i.e., the difference between the total pension liability and the pension plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. GASB No. 68 separates financial reporting from funding requirements for pension plans. The net pension asset as of December 31, 2021 is $27.7 million and the net pension liability as of December 31, 2020 is $469.8 million.

SMUD provides its employees with two cash deferred compensation plans: one pursuant to Internal Revenue Code (“IRC”) Section 401(k) (the “401(k) Plan”) and one pursuant to IRC Section 457 (the “457 Plan” and collectively, the “Plans”). The Plans are contributory plans in which SMUD’s employees contribute the funds. Each of SMUD’s eligible full-time or permanent part-time employees may participate in either or both Plans, and amounts contributed by employees are vested immediately. Such funds are held by a trustee in trust for the employees upon retirement from SMUD service and, accordingly, are not subject to the general claims of SMUD’s creditors. SMUD makes annual contributions to the 401(k) Plan on behalf of certain employees pursuant to a memorandum of understanding with both of its collective bargaining units. SMUD matches non-represented employee contributions to the 401(k) Plan up to a set amount. SMUD also makes limited discretionary contributions to non-represented employees hired after January 1, 2013, which contributions fully vest after five years. SMUD made contributions into the 401(k) Plan of $6.1 million in 2021 and $5.8 million in 2020. Prior to 2022, SMUD did not match employee contributions, nor make contributions on behalf of its employees to the 457 Plan. Beginning in 2022, SMUD makes annual contributions to the 457 Plan on behalf of certain employees and matches employee contributions up to a set amount pursuant to a memorandum of understanding with one of its collective bargaining units. Participating employees made contributions into both Plans totaling $30.6 million in 2021 and $28.8 million in 2020.
Other Post-Employment Benefits

SMUD provides post-employment healthcare benefits, in accordance with SMUD policy and negotiated agreements with employee representation groups in a single employer defined benefit plan, to all employees who retire from SMUD, and their dependents. SMUD also provides post-employment healthcare benefits to covered employees who are eligible for disability retirement. SMUD contributes the full cost of coverage for retirees hired before January 1, 1991, and a portion of the cost based on credited years of service for retirees hired after January 1, 1991. SMUD also contributes a portion of the costs of coverage for these retirees’ dependents. Retirees are required to contribute the portion that is not paid by SMUD. The benefits, benefit levels, retiree contributions and employer contributions are governed by SMUD and can be amended by SMUD through its personnel manual and union contracts.

SMUD’s post-employment health care benefits are funded through the PERS California Employers’ Retiree Benefit Trust (“CERBT”), an agent multiple-employer plan. The funding of a plan occurs when the following events take place: the employer makes payments of benefits directly to or on behalf of a retiree or beneficiary; the employer makes premium payments to an insurer; or the employer irrevocably transfers assets to a trust or other third party acting in the role of trustee, where the plan assets are dedicated to the sole purpose of the payments of the plan benefits, and creditors of the government do not have access to those assets.

SMUD has elected to contribute the normal costs to the CERBT but annually receive reimbursement for cash benefit payments from the CERBT. In 2022 and 2021, SMUD decided to forgo making a contribution for the normal costs to the CERBT because there was a net OPEB asset at December 31, 2021 and 2020. In May 2020, SMUD made contributions for the normal costs to the CERBT in the amount of $9.5 million. SMUD can elect to make additional contributions to the trust. During 2021 and 2020, SMUD made healthcare benefit contributions by paying actual medical costs of $24.1 million and $23.8 million, respectively. During 2021 and 2020, SMUD received a $23.3 million and $20.0 million reimbursement for cash benefit payments from the CERBT, respectively.

At June 30, 2021 and 2020, SMUD estimated that the actuarially determined accumulated post-employment benefit obligation was approximately $398.2 and $405.8 million, respectively. At June 30, 2021 and 2020, the plan was 113.1% and 97.9% funded, respectively.

SMUD’s actuary uses PERS economic and other assumptions as the basis for the calculation of the post-employment benefit obligation. The actual accumulated post-employment benefit obligation will vary substantially if such PERS assumptions, such as interest rate and life expectancy, among others, prove to be inaccurate or different than SMUD’s actual experience. Although SMUD believes that such assumptions and estimates are reasonable, no assurance can be given that any such assumptions will prove to be accurate, or that SMUD’s actual accumulated post-employment benefit obligation will not materially exceed its estimates. Additional information is available in Note 15 (Other Postemployment Benefits) and “Required Supplementary Information” to SMUD’s consolidated financial statements.

GASB previously issued SGAS No. 75 “Accounting and Financial Reporting for Postemployment Benefits Other than Pensions”. The primary objective of GASB No. 75 is to improve accounting and financial reporting by state and local governments for post-employment benefits other than pensions (“OPEB”). Under GASB No. 75, SMUD is required to report the net OPEB asset or net OPEB liability (i.e., the difference between the total OPEB liability and the OPEB plan’s net position or market value of assets) in its Statement of Net Position. This standard requires shorter amortization periods for recognition of non-investment gains and losses and actuarial assumption changes, as well as for recognition of investment gains and losses. The net OPEB asset as of December 31, 2021 and December 31, 2020 is $57.5 million and $0.8 million, respectively.
CAPITAL REQUIREMENTS AND OUTSTANDING INDEBTEDNESS

Estimated Capital Requirements

SMUD has a projected capital requirement of approximately $2.124 billion for the period 2022 through 2026 as shown in the table below. Approximately 60% of this requirement is anticipated to be funded with internally generated funds and cash on hand.

Special projects include costs relating to construction of large substations and the potential construction of Solano Phase 4. The Estimated Capital Requirements table below includes $207 million for Solano Phase 4. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Solano 4 Project.”

ESTIMATED CAPITAL REQUIREMENTS

(Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Service Area and Other System Improvements Including Distribution System</th>
<th>Improvements to Existing Generation Plant</th>
<th>General Plant</th>
<th>Special Projects</th>
<th>Total Capital Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>$202,367</td>
<td>$77,635</td>
<td>$80,862</td>
<td>$90,393</td>
<td>$451,258</td>
</tr>
<tr>
<td>2023</td>
<td>137,181</td>
<td>50,563</td>
<td>110,371</td>
<td>220,775</td>
<td>518,890</td>
</tr>
<tr>
<td>2024</td>
<td>215,652</td>
<td>46,751</td>
<td>73,569</td>
<td>57,373</td>
<td>393,346</td>
</tr>
<tr>
<td>2025</td>
<td>215,252</td>
<td>46,751</td>
<td>73,569</td>
<td>57,373</td>
<td>392,946</td>
</tr>
<tr>
<td>2026</td>
<td>189,452</td>
<td>46,751</td>
<td>73,569</td>
<td>57,373</td>
<td>367,146</td>
</tr>
</tbody>
</table>

Outstanding Indebtedness

General. SMUD typically finances its capital requirements through the sale of revenue bonds, the sale of commercial paper, from draws on its Revolving Credit Facility (as defined below) and from internally generated funds.

SMUD’s Electric Revenue Bonds (the “Senior Bonds”) are issued pursuant to Resolution No. 6649 (the “Senior Resolution”) adopted in 1971, as amended and supplemented (the “Senior Resolution”). As of May 1, 2022, SMUD had Senior Bonds in the aggregate principal amount of $1,966,925,000 outstanding. Immediately following the issuance of the [2022 Series J Bonds] and the refunding of the Refunded Bonds, as described in the forepart of this Official Statement, Senior Bonds in the aggregate principal amount of $[_________] will be outstanding under the Senior Resolution. See “PLAN OF FINANCE” in the forepart of this Official Statement. The Senior Bonds are payable solely from the Net Revenues of SMUD’s Electric System. The Senior Bonds are subordinate in right of payment to the prior payment of “Maintenance and Operation Costs” and “Energy Payments” as defined in the Master Resolution, including payments by SMUD to TANC under PA3, payments by SMUD under power purchase agreements related to the Authorities and payments by SMUD to NCGA and NCEA under their respective gas supply contracts.

SMUD’s Subordinated Electric Revenue Bonds (the “Subordinated Bonds”) are issued pursuant to Resolution No. 85-11-1 of SMUD, adopted on November 7, 1985, as amended and supplemented (the

* Preliminary, subject to change.
“Subordinate Resolution”). As of May 1, 2022, SMUD had Subordinated Bonds in the aggregate principal amount of $200,000,000 outstanding. The Subordinated Bonds are payable solely from the Net Subordinated Revenues of SMUD’s Electric System. The Subordinated Bonds are subordinate in right of payment to the prior payment of principal of and interest on the Senior Bonds.

SMUD issues commercial paper notes (the “Notes”) from time to time. As of May 1, 2022, no Notes were outstanding. Currently, Notes in the aggregate principal amount of $300,000,000 may be outstanding at any one time, but SMUD reserves the right to increase or decrease the aggregate principal amount of the Notes that may be outstanding at any one time in the future. The Notes are secured by letters of credit issued by commercial banks. The Notes (and SMUD’s obligations to repay drawings under the letters of credit) are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Senior Bonds and the Subordinated Bonds. Drawings under the letters of credit, to the extent not repaid immediately from the proceeds of commercial paper or other available SMUD funds, are repayable with interest over a period of five years. The letters of credit currently expire in February, and August of 2025.

SMUD also entered into a revolving credit agreement with a commercial bank and issued its taxable and tax-exempt revolving notes thereunder (collectively, the “Revolving Credit Facility”) in February 2022. As of May 1, 2022, no principal was outstanding under the Revolving Credit Facility. Currently, the aggregate principal amount that can be outstanding under the Revolving Credit Facility at any one time is limited to $100,000,000. However, SMUD reserves the right to increase or decrease the aggregate principal amount that can be outstanding at any one time under the Revolving Credit Facility in the future. SMUD’s payment obligations under the Revolving Credit Facility are payable solely from available revenues of SMUD’s Electric System and are subordinate in right of payment to the prior payment of principal of, premium if any, and interest on the Bonds (including the [2022 Series J Bonds]) and the Subordinated Bonds. The current term of the Revolving Credit Facility expires in February 2026.

Joint Powers Authorities. SMUD has entered into long-term power purchase agreements with SFA relating to the Local Gas-Fired Plants. Under such agreements, SMUD has exclusive control of the dispatch of all five of the Local Gas-Fired Plants and takes all of the power produced by the Local Gas-Fired Plants. See “POWER SUPPLY AND TRANSMISSION – Power Generation Facilities – Local Gas-Fired Plants.” The Authorities are each treated as component units of SMUD for accounting purposes. Only SFA has outstanding debt, which relates solely to the SFA Project and is payable solely from capacity payments made by SMUD under the related power purchase agreement. The SPA bonds were redeemed on July 1, 2015. The CVFA bonds were defeased in September 2019. The SCA bonds were defeased in September 2019. The SFA power purchase agreement relating to the SFA Project is on a take-or-pay basis whereby payments must be made by SMUD regardless of plant performance. As of June 1, 2022, bonds issued by SFA to finance the SFA Project were outstanding in the aggregate principal amount of $101,185,000. SMUD’s payments under the power purchase agreements relating to the Local Gas-Fired Plants are payable from revenues of SMUD’s Electric System prior to the payment of principal and interest on the Senior Bonds and Subordinated Bonds as either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and Subordinate Resolution.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Gas Authority No. 1 (“NCGA”). NCGA is treated as a component unit of SMUD for accounting purposes. NCGA issued $757,055,000 in bonds in May 2007 for the purpose of paying Morgan Stanley Capital Group in advance for natural gas to be delivered to NCGA and then sold to SMUD pursuant to a long-term purchase contract. SMUD’s obligation under the purchase contract is limited to payment for gas supplies delivered by NCGA. SMUD’s payments under the purchase contract are payable from revenues of SMUD’s Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either “Maintenance and Operation Costs” or “Energy
Payments” under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCGA bonds. As of May 1, 2022, related bonds in the aggregate principal amount of $163,485,000 remain outstanding.

SMUD and Sacramento Municipal Utility District Financing Authority formed a joint powers authority called the Northern California Energy Authority (“NCEA”). NCEA is treated as a component unit of SMUD for accounting purposes. NCEA issued $539,615,000 in bonds in December 2018 for the purpose of paying J. Aron & Company LLC in advance for natural gas or electricity to be delivered to NCEA and then sold to SMUD pursuant to a long-term purchase contract. SMUD’s obligation under the purchase contract is limited to payment for gas or electricity supplies delivered by NCEA. SMUD’s payments under the purchase contract are payable from revenues of SMUD’s Electric System prior to the payment of principal and interest on the Senior Bonds and the Subordinated Bonds as either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution. SMUD is not obligated to make any payments in respect of debt service on the NCEA bonds. As of May 1, 2022, related bonds in the aggregate principal amount of $539,615,000 remain outstanding.

[Remainder of Page Intentionally Left Blank]
Interest Rate Swap Agreements. SMUD has two interest rate swap agreements relating to previously or currently outstanding Subordinated Bonds and three forward starting interest rate swap agreements relating to potential refunding bonds to be issued in the future, as shown in the following table. For more information, see Note 9 (Derivative Financial Instruments) to SMUD’s consolidated financial statements.

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Termination Date</th>
<th>SMUD Pays</th>
<th>SMUD Receives</th>
<th>Notional Amount (000's)</th>
<th>Counterparty</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/2/1997</td>
<td>7/1/2024</td>
<td>Floating</td>
<td>SIFMA</td>
<td>5.154%</td>
<td>J Aron &amp; Company LLC</td>
</tr>
<tr>
<td>7/15/2003</td>
<td>8/15/2028</td>
<td>Fixed</td>
<td>2.894%</td>
<td>63% of 1M LIBOR</td>
<td>Morgan Stanley Capital Services, Inc.</td>
</tr>
<tr>
<td>07/20/2022</td>
<td>08/15/2033</td>
<td>Fixed</td>
<td>1.607%</td>
<td>SIFMA</td>
<td>Morgan Stanley Capital Services, Inc.</td>
</tr>
<tr>
<td>07/12/2023</td>
<td>08/15/2041</td>
<td>Fixed</td>
<td>0.718%</td>
<td>70% of 1M LIBOR</td>
<td>Barclays Bank</td>
</tr>
<tr>
<td>07/12/2023</td>
<td>08/15/2033</td>
<td>Fixed</td>
<td>0.554%</td>
<td>70% of 1M LIBOR</td>
<td>Barclays Bank</td>
</tr>
</tbody>
</table>

The obligations of SMUD under the swap agreements are not secured by a pledge of revenues of SMUD’s electric system or any other property of SMUD. SMUD does not currently have any collateral posting requirements with respect to the interest rate swap agreements but SMUD may be required to post collateral under certain circumstances. [In connection with the refunding of the Refunded Bonds, as described in the forepart of this Official Statement, SMUD expects to terminate the SIFMA swap with Morgan Stanley Capital Services, Inc. that would otherwise be effective on July 20, 2022. See “PLAN OF FINANCE” in the forepart of this Official Statement.]

Build America Bonds Subsidy Payments. SMUD’s Electric Revenue Bonds, 2009 Series V (the “2009 Series V Bonds”) and Electric Revenue Bonds, 2010 Series W (the “2010 Series W Bonds”) were issued as “Build America Bonds” under the provisions of the American Recovery and Reinvestment Act of 2009. At the time the 2009 Series V Bonds and 2010 Series W Bonds were issued, SMUD expected to receive an annual cash subsidy payment from the United States Treasury equal to 35% of the interest payable on the 2009 Series V Bonds and the 2010 Series W Bonds. However, as a result of the federal budget process, many payments from the federal government, including Build America Bonds subsidy payments, have been reduced. Absent the federal budget reductions, the aggregate annual cash subsidy payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds would be approximately $9.8 million. With the current federal budget reductions, SMUD has typically been receiving aggregate annual cash subsidy payments with respect to the 2009 Series V Bonds and the 2010 Series W Bonds of approximately $9.2 million. It is possible that future federal budget actions could further reduce, or eliminate entirely, the annual cash subsidy payments with respect to Build America Bonds, including the annual cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds and the 2010 Series W Bonds. SMUD cannot predict the likelihood of the further reduction or elimination of the Build America Bonds subsidy payments. A significant reduction or elimination of the cash subsidy payments payable to SMUD with respect to the 2009 Series V Bonds or the 2010 Series W Bonds could be material.
Debt Service Requirements. The following table sets forth SMUD’s debt service requirements with respect to SMUD’s Senior Bonds and Subordinated Bonds.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Senior Bonds Debt Service(2)</th>
<th>Subordinated Bonds Debt Service(3)</th>
<th>Total Debt Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>$202,767,394</td>
<td>$10,000,000</td>
<td>$212,767,394</td>
</tr>
<tr>
<td>2022</td>
<td>202,721,025</td>
<td>10,000,000</td>
<td>212,721,025</td>
</tr>
<tr>
<td>2023</td>
<td>210,915,894</td>
<td>10,861,111</td>
<td>221,777,005</td>
</tr>
<tr>
<td>2024</td>
<td>179,387,306</td>
<td>7,483,333</td>
<td>186,870,639</td>
</tr>
<tr>
<td>2025</td>
<td>180,108,381</td>
<td>8,833,333</td>
<td>188,941,714</td>
</tr>
<tr>
<td>2026</td>
<td>180,206,231</td>
<td>5,500,000</td>
<td>185,706,231</td>
</tr>
<tr>
<td>2027</td>
<td>180,295,231</td>
<td>6,000,000</td>
<td>186,295,231</td>
</tr>
<tr>
<td>2028</td>
<td>180,403,513</td>
<td>6,000,000</td>
<td>186,403,513</td>
</tr>
<tr>
<td>2029</td>
<td>129,030,387</td>
<td>6,000,000</td>
<td>135,030,387</td>
</tr>
<tr>
<td>2030</td>
<td>139,100,391</td>
<td>6,000,000</td>
<td>145,100,391</td>
</tr>
<tr>
<td>2031</td>
<td>144,711,032</td>
<td>6,000,000</td>
<td>150,711,032</td>
</tr>
<tr>
<td>2032</td>
<td>144,555,595</td>
<td>6,000,000</td>
<td>150,555,595</td>
</tr>
<tr>
<td>2033</td>
<td>144,411,102</td>
<td>6,000,000</td>
<td>150,411,102</td>
</tr>
<tr>
<td>2034</td>
<td>144,261,606</td>
<td>6,000,000</td>
<td>150,261,606</td>
</tr>
<tr>
<td>2035</td>
<td>144,110,773</td>
<td>6,000,000</td>
<td>150,110,773</td>
</tr>
<tr>
<td>2036</td>
<td>143,962,001</td>
<td>6,000,000</td>
<td>149,962,001</td>
</tr>
<tr>
<td>2037</td>
<td>83,681,613</td>
<td>6,000,000</td>
<td>89,681,613</td>
</tr>
<tr>
<td>2038</td>
<td>83,528,863</td>
<td>6,000,000</td>
<td>89,528,863</td>
</tr>
<tr>
<td>2039</td>
<td>80,375,800</td>
<td>6,000,000</td>
<td>86,375,800</td>
</tr>
<tr>
<td>2040</td>
<td>80,382,550</td>
<td>6,000,000</td>
<td>86,382,550</td>
</tr>
<tr>
<td>2041</td>
<td>85,735,800</td>
<td>6,000,000</td>
<td>91,735,800</td>
</tr>
<tr>
<td>2042</td>
<td>31,422,350</td>
<td>28,490,000</td>
<td>59,912,350</td>
</tr>
<tr>
<td>2043</td>
<td>31,214,150</td>
<td>28,490,300</td>
<td>59,704,450</td>
</tr>
<tr>
<td>2044</td>
<td>31,008,750</td>
<td>28,490,350</td>
<td>59,499,100</td>
</tr>
<tr>
<td>2045</td>
<td>30,799,950</td>
<td>28,494,550</td>
<td>59,294,500</td>
</tr>
<tr>
<td>2046</td>
<td>25,391,750</td>
<td>28,492,150</td>
<td>53,883,900</td>
</tr>
<tr>
<td>2047</td>
<td>25,392,000</td>
<td>28,492,700</td>
<td>53,884,700</td>
</tr>
<tr>
<td>2048</td>
<td>25,392,500</td>
<td>28,490,450</td>
<td>53,882,950</td>
</tr>
<tr>
<td>2049</td>
<td>25,390,750</td>
<td>28,489,800</td>
<td>53,880,550</td>
</tr>
<tr>
<td>2050</td>
<td>25,394,250</td>
<td>-</td>
<td>25,394,250</td>
</tr>
<tr>
<td>Total</td>
<td>$3,316,058,938</td>
<td>$370,608,077</td>
<td>$3,686,667,015</td>
</tr>
</tbody>
</table>

(1) Does not include outstanding bonds issued by the Authorities for the Local Gas-Fired Plants. Does not include bonds issued by NCGA, NCEA or SMUD’s portion of bonds issued by TANC. Payments by SMUD which are used by the Authorities, NCGA, NCEA, and TANC to pay debt service on such bonds constitute either “Maintenance and Operation Costs” or “Energy Payments” under the Senior Resolution and the Subordinate Resolution.

(2) Does not include debt service for the 2022 Series I Bonds or reflect the refunding of the Refunded Bonds. Debt service is not reduced by the amount of any subsidy that SMUD currently expects to receive in connection with the 2009 Series V Bonds and 2010 Series W Bonds.

(3) Based on an assumed interest rate of 3% per annum following (i) the initial scheduled Mandatory Purchase Date of October 17, 2023 for SMUD's Subordinated Electric Revenue Bonds, 2019 Series A and (ii) the initial scheduled Mandatory Purchase Date of October 15, 2025 for SMUD’s Subordinated Electric Revenue Bonds, 2019 Series B.

Note: Amounts may not add due to rounding.
INSURANCE

SMUD maintains a comprehensive property/casualty insurance program designed to protect against catastrophic losses that would have an adverse effect on its financial position or operational capabilities. Insurance programs are continuously reviewed and modified when construction, operational exposures, or developments in the insurance industry so warrant. Long term relationships with a variety of insurers minimize SMUD’s susceptibility to the effects of market cycles. SMUD budgets reserves to meet potential insurance deductibles and self-insured liability claims.

SMUD safeguards assets with all-risk property and boiler/machinery insurance with limits of $800 million per occurrence for physical damage and business interruption combined. Various coverage sublimits and deductibles apply to losses arising from certain perils, such as business interruption, earthquake, or flood, respectively. Liability insurance is in effect to defend and indemnify SMUD against third party claims, including general, automobile and sudden and accidental pollution claims with policy limits of $140 million, and wildfire coverage with policy limits of $250 million, all of which include a variety of self-insured retentions.

Nuclear property and liability insurance policies are maintained in accordance with the NRC’s requirements for decommissioned nuclear plants that maintain dry storage of spent fuel on-site. This includes $100 million in first party property damage and decontamination, $100 million for nuclear liability arising from accidents on-site, $200 million for supplier’s and transporter’s nuclear liability, and $300 million for nuclear worker liability. SMUD is exposed to possible retrospective assessments for nuclear property events occurring at other nuclear facilities in the United States capped at ten times SMUD’s annual nuclear property premium (currently the maximum retrospective assessment is approximately $1,000,000).

Other types of insurance include non-owned aircraft liability, workers’ compensation, crime, cyber security, fidelity, fiduciary liability, directors’ and officers’ liability, professional errors and omissions, transportation and installation, and builder’s risk for major facilities under construction.

LEGAL PROCEEDINGS

SMUD is a party to numerous actions arising out of the conduct of its business and affairs, some of which are discussed below. SMUD believes that any losses or adverse financial results it may suffer in these current actions, to the extent not covered by insurance, would not, in the aggregate, have an adverse material impact on SMUD, its business and affairs, the results of its operations, financial position or liquidity.

Environmental Litigation

SMUD was one of many potentially responsible parties that had been named in a number of actions relating to environmental claims and/or complaints. SMUD has resolved these environmental claims and/or complaints and entered into settlement agreements and/or consent orders. These settlement agreements and consent orders have statutory reopener provisions which allow regulatory agencies to seek additional funds for environmental remediation under certain limited circumstances. While SMUD believes it is unlikely that any of the prior settlements or consent orders will be reopened, the possibility exists. If any of the settlements or consent orders were to be reopened, SMUD management does not believe that the outcome will have a material adverse impact on SMUD’s financial position, liquidity or results of operations.
Claim for Accidental Death

In February 2020, SMUD received a claim alleging an employee of a gutter company died after he accidentally came into contact with a SMUD electrical line during an installation. The claim is for approximately $43 million. SMUD concluded the electrical lines at the site of the accident exceeded required clearances and there is no basis for the claim against SMUD. SMUD management believes that SMUD has no potential liability in this matter and that any costs ultimately borne by SMUD will not have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

Proposition 26 Lawsuit

Two SMUD customers jointly filed a complaint against SMUD in October 2019. The complaint states that SMUD violated Proposition 26 (see “DEVELOPMENTS IN THE ENERGY MARKETS – State Legislation and Regulatory Proceedings – Proposition 26” for a description of Proposition 26) when SMUD’s Board on June 24, 2019 adopted rate increases for 2020 and 2021. The Plaintiffs contend the rate increases do not reflect SMUD’s reasonable cost of service because they include a 9.2% scalar that SMUD applied to its TOD residential rate restructure in the 2017 rate process which SMUD’s Board of Directors adopted at that time. Therefore, the plaintiffs contend SMUD’s 2020 and 2021 rates should be decreased by this scalar amount because the scalar exceeded SMUD’s cost of service, and refunded to SMUD customers. Because SMUD has a strong evidentiary record supporting the Board’s rate decisions in 2017 and 2019, and views the lawsuit as having little merit, SMUD anticipates the court will rule in SMUD’s favor. The plaintiffs have requested to amend the complaint, which has delayed the court’s proceeding until the amended complaint is filed. While SMUD believes the court will rule in its favor, SMUD is unable to predict the outcome of the litigation or, if or to the extent SMUD ultimately is not successful in the litigation, what remedies against SMUD may be available. SMUD management believes that if SMUD is not successful in the litigation, and to the extent the outcome would have a material adverse impact on SMUD’s financial position, liquidity, or results of operations, the Board would make appropriate rate modifications based on an evidentiary record consistent with guidance from a judicial decision in the case.

Other Litigation Matters

Currently, SMUD is party to various claims, legal actions and complaints relating to its operations, including but not limited to: property damage and personal injury, contract disputes, torts, and employment matters. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD’s financial position, liquidity or results of operation.

FERC Administrative Proceedings

SMUD is involved in a number of FERC administrative proceedings related to the operation of wholesale energy markets, regional transmission planning, gas transportation and the development of NERC reliability standards. While these proceedings are complex and numerous, they generally fall into the following categories: (i) filings initiated by the CAISO (or other market participants) to adopt/modify the CAISO Tariff and/or establish market design and behavior rules; (ii) filings initiated by existing transmission owners (i.e., PG&E and the other IOUs) to pass-through costs to their existing wholesale transmission customers; (iii) filings initiated by FERC on market participants to establish market design and behavior rules or to complain about or investigate market behavior by certain market participants; (iv) filings initiated by transmission owners under their transmission owner tariffs for the purpose of establishing a regional transmission planning process; (v) filings initiated by providers of firm gas transportation services under the Natural Gas Act; and (vi) filings initiated by NERC to develop reliability standards applicable to owners, users, and operators of the bulk electric system. In addition, SMUD is an active participant in other FERC administrative proceedings, including those related to reliability and
cybersecurity standards, variable resource integration, and transmission planning and cost allocation. SMUD management believes that the ultimate resolution of these matters will not have a material adverse effect on SMUD’s financial position, liquidity or results of operations.

**CPUC Administrative Proceedings**

In July 2016, the CPUC adopted a final decision on PG&E’s triennial gas transmission and storage (“GT&S”) rate case. The case affects SMUD through several tariff rates SMUD pays to move natural gas along PG&E’s backbone transmission lines. As a result of the 2010 San Bruno pipeline explosion, PG&E has applied for a significant increase in its revenue requirement to pay for enhanced safety measures on its entire gas pipeline system, including the backbone. PG&E proposed to increase the transportation tariff significantly for the period 2015-2017 in order to collect revenues to finance dramatic capital expenditures to implement over 75 remedies to enhance pipeline safety improvements of PG&E’s gas transmission pipeline system. The CPUC authorized an 85% increase in PG&E’s revenue requirement, which included an even larger rate increase for electric generators who use local transmission to supply their power plants. Some of those affected parties advocated for a single transportation rate that would eliminate the cost-based distinction between the high local rate that they would pay and the low backbone transmission rate that SMUD would pay. SMUD opposed those parties. In the final decision, CPUC ruled in SMUD’s favor resulting in a backbone rate that remained essentially unchanged through 2018. While certain parties impacted by the increased local transportation rates sought a rehearing on the final decision and later filed a petition for modification of that decision, the CPUC has not acted on the petition for rehearing and it denied the petition for modification.

PG&E’s 2019 GT&S rate case (the “2019 GT&S Case”) was filed on October 30, 2017, and seeks to significantly increase the backbone transmission rates SMUD pays. Unlike the prior GT&S case described in the preceding paragraph, in the 2019 GT&S Case, PG&E is also seeking to divest itself of some of its primary gas storage assets, as well as upgrade those which will remain in its portfolio. This is largely in response to increased regulations and needed costly modifications imposed by the Division of Oil, Gas, and Geothermal Resources in the wake of the Aliso Canyon gas storage leak that occurred in 2016. PG&E estimated that these regulatory changes would reduce the capacity of its gas storage assets by nearly forty percent. Moreover, changes in PG&E’s resource mix due to State policies favoring carbon-free resources, make this divestiture a key part of its overall resource portfolio strategic plan.

SMUD actively participated in the 2019 GT&S Case and was successful in affirming the application of cost causation principles to prevent excessive and unreasonable costs being shifted to electric generator backbone customers like SMUD, either through proposed changes in PG&E’s natural gas storage strategy or through cost shifts within the electric generator customer class. In August 2020, PG&E hosted a workshop on local transmission study parameters and approaches. Several parties presented studies showing varying levels of cost allocation between core and non-core customers.

PG&E filed its 2023 General Rate Case (“GRC”) in June 2021 which includes its gas transmission and storage revenue requirements. In September 2021, PG&E filed an application for approval of its Gas Cost Allocation and Rate Design Proposals (“CARD”). SMUD will actively participate in PG&E’s GRC and CARD proceedings to ensure that costs are fairly allocated to non-core customers, including electric generator backbone customers. Separately, SMUD continues to participate and monitor a proceeding at the CPUC concerning long-term gas system planning. At this point in these proceedings, SMUD management does not anticipate that the ultimate resolution of such cases will have a material adverse effect on SMUD’s financial position, liquidity, or results of operation.
DEVELOPMENTS IN THE ENERGY MARKETS

Background; Electric Market Deregulation

In 1996, the State partially deregulated its electric energy market. CAISO was established, as well as an independent power exchange, the PX. The PX was originally established to permit power generators to sell power on a competitive spot market basis; however, the PX has ceased all power exchange operations and filed for bankruptcy protection.

During 2000 and 2001, the State and many of the other western states experienced significantly higher and more volatile prices for natural gas and wholesale electricity. In reaction to such conditions, SMUD made significant changes to its business strategy to mitigate the impacts of the more volatile and unpredictable energy markets. While the difficult market conditions have moderated substantially, volatility in energy prices in the State are always a potential risk due to a variety of factors which affect both the supply and demand for electricity in the western United States. These factors include, but are not limited to, the implementation of the CAISO market design changes, insufficient generation resources, the increase in intermittent renewable energy resources, natural gas price volatility, fuel costs and availability, weather, transmission constraints and levels of hydroelectric generation within the region. While SMUD has taken a number of steps to mitigate its exposure to price volatility associated with these factors, this price volatility under extreme conditions may contribute to greater volatility in SMUD’s net revenues from the sale of electric energy and, therefore, could materially adversely affect the financial condition and liquidity of SMUD. For a discussion of SMUD’s current resource planning activities and risk management strategies, see “BUSINESS STRATEGY” above.

Cybersecurity

In 2015, Congress passed the Cybersecurity Information Sharing Act, which facilitated the secure sharing of information about cybersecurity threats between electric utilities and the federal government. SMUD participates in sharing and receiving information about cyber security threats in real time through the Electricity Information Sharing and Analysis Center (“E-ISAC”), the central hub for such data to actively manage risk related to potential cyber intrusion.

SMUD also participates in NERC’s development of mandatory, enforceable cyber security standards to address vulnerabilities in electric utility systems. SMUD also adopts voluntary measures suggested as best practices by the National Institute of Standards and Technology (“NIST”) in its national framework.

Cyber-security continues to be a top priority for SMUD. SMUD’s prudent response to this ever-changing threat requires constant monitoring and frequent updates to implement new regulatory requirements as they are developed. SMUD manages risk related to frequently changing regulatory requirements by participating in the development of standards at NERC and NIST and through active engagement in the cyber security policy dialogue in Congress. The Omnibus Spending Bill for Fiscal Year 2022 signed into law by President Biden on March 15, 2022 included a measure which SMUD and other public power entities opposed as redundant to existing E-ISAC reporting without increasing security, being a requirement that critical infrastructure owners and operators report significant cyber incidents to the Cybersecurity and Infrastructure Security Agency (“CISA”) within 72 hours and ransomware payments within 24 hours. Under the measure, CISA is directed to publish a notice of proposed rulemaking to implement the reporting requirements within 24 months.

Notwithstanding regulatory developments, cyberattacks are becoming more sophisticated and certain cyber incidents, such as surveillance, may remain undetected for an extended period. Critical
infrastructure sectors such as the electric grid may be specific targets of cybersecurity attacks or threats. Attacks or threats directed at critical electric or energy sector operations could damage or cause the shutdown of generation, transmission or distribution assets that are essential to SMUD’s ability to serve its customers, cause operational malfunctions and outages affecting SMUD’s electric system, and result in costly recovery and remediation efforts. The costs of security measures or of remedying breaches could be material.

**Federal Legislation and Regulatory Proceedings**

*Energy Policy Act of 2005.* On August 8, 2005, the Energy Policy Act of 2005 (the “EPAct of 2005”) was signed into law. The law includes a number of energy-related provisions, including among other things limited FERC jurisdiction over interstate transmission assets of municipal utilities, cooperatives and federal utilities to order these entities to provide transmission services on rates and terms comparable to those the entities charge and provide to themselves; the grant of authority to FERC to establish and certify an electric reliability organization to develop and enforce reliability standards for users of the bulk power transmission system; and prohibitions of certain market practices including the provision of false information and related expansion of FERC civil and criminal penalty authority. So far, the most visible impact of the EPAct of 2005 on SMUD has been the development of federal reliability standards.

*Federal Regulation of Transmission Access.* The Energy Policy Act of 1992 (the “Energy Policy Act”) made fundamental changes in the federal regulation of the electric utility industry, particularly in the area of transmission access. The Energy Policy Act provided FERC with the authority to require a transmitting utility to provide transmission services at rates, charges, terms and conditions set by FERC. The purpose of these changes, in part, was to bring about increased competition in the electric utility industry. Under the Energy Policy Act, electric utilities owned by municipalities and other public agencies which own or operate electric power transmission facilities which are used for the sale of electric energy at wholesale are “transmitting utilities” subject to the requirements of the Energy Policy Act.

In April 1996, FERC issued its Order No. 888 to implement the competitive open access to transmission lines authorized by the Energy Policy Act. Order No. 888 requires the provision of open access transmission services on a nondiscriminatory basis by all “jurisdictional utilities” (which, by definition, does not include municipal entities like SMUD) by requiring all such utilities to file OATTs. Order No. 888 also requires “nonjurisdictional utilities” (which, by definition, does include SMUD) that purchase transmission services from a jurisdictional utility under an open access tariff and that owns or controls transmission facilities to provide open access service to the jurisdictional utility under terms that are comparable to the service that the nonjurisdictional utility provides itself. Section 211A of the EPAct of 2005 authorizes, but does not require, FERC to order unregulated transmission utilities to provide transmission services. Specifically, FERC may require an unregulated transmitting utility to provide access to their transmission facilities (1) at rates that are comparable to those that the unregulated transmitting utility charges to itself; and (2) on terms and conditions (not relating to rates) that are comparable to those under which the unregulated transmitting utility provides transmission services to itself that are not unduly discriminatory or preferential.

On February 16, 2007, FERC issued Order 890, which concluded that reform of the pro forma OATT was necessary to reduce the potential for undue discrimination and provide clarity in the obligations of transmission providers and customers. Significantly, in Order 890 FERC stated that it will implement its authority under Section 211A on a case-by-case basis and retain the current reciprocity provisions.

On July 21, 2011, FERC issued Order 1000, which among other things requires public utility (jurisdictional) transmission providers to participate in a regional transmission planning process that produces a regional transmission plan and that incorporates a regional and inter-regional cost allocation.

A-62
methodology. Similar to Order 890, FERC states that it will implement its authority under Section 211A on a case-by-case basis. However, in Order 1000, FERC appears to expand upon the current reciprocity provisions. Further, FERC states that it has the authority to allocate costs to beneficiaries of services provided by specific transmission facilities even in the absence of a contractual relationship between the owner of the transmission facilities and the identified beneficiary.

SMUD, individually, and through the Large Public Power Council (“LPPC”), unsuccessfully sought a rehearing of Order 1000 and subsequently appealed Order 1000 to the D.C. Circuit Court of Appeals. On August 15, 2014, the D.C. Circuit Court of Appeals rejected all of the arguments raised on appeal, upholding the entirety of Order 1000. LPPC filed a request for en banc review solely on FERC’s ability to allocate costs in the absence of a contractual relationship. The D.C. Circuit Court of Appeals denied rehearing on October 17, 2014. LPPC did not petition the U.S. Supreme Court for writ of certiorari.

The jurisdictional members of WestConnect filed their proposed regional planning process and cost allocation methodology through a series of compliance filings. FERC accepted binding cost allocation for jurisdictional transmission providers of WestConnect and mandated that non-jurisdictional transmission providers identified as beneficiaries of a project have the ability to not accept the cost allocation. Following FERC’s acceptance of the final WestConnect Order 1000 process on May 14, 2015, SMUD executed the WestConnect Order 1000 transmission planning participation agreement with its membership effective January 1, 2016 for the start of the 2016-2017 planning cycle.

However, in response to FERC’s WestConnect orders on compliance, El Paso Electric Company (“El Paso”), a jurisdictional transmission provider, petitioned to the Court of Appeals for the 5th Circuit. In its appeal, El Paso contends that FERC’s WestConnect orders violate Order 1000’s cost causation principle because WestConnect’s binding cost allocation applies only to the jurisdictional transmission providers and thus forces jurisdictional transmission providers to subsidize projects benefitting non-jurisdictional transmission providers that opt-out of projects. SMUD and the other non-jurisdictional transmission providers agreed on a settlement to resolve the matters on appeal in the 5th Circuit, and filed the settlement with FERC on February 16, 2022. Importantly, the settlement does not affect the ability of non-jurisdictional transmission providers to not accept cost allocation for a project. If approved by FERC, the jurisdictional transmission providers have agreed to dismiss their 5th Circuit appeal. The court has held the case in abeyance during the settlement discussions while the parties develop the settlement documents for the FERC filings. In the meantime, SMUD continues to participate in the WestConnect process.

In addition to regional planning, Order 1000 includes an interregional transmission planning component. WestConnect and the other two regional planning entities in the western interconnection (CAISO and Northern Grid), have developed a common FERC-approved approach to jointly evaluate transmission projects that interconnect two or more regions. While El Paso did not appeal FERC’s orders on WestConnect’s interregional planning, the decision of the Court of Appeals for the 5th Circuit described above does implicate the interregional cost allocation process because it defer to WestConnect’s regional cost allocation methodology.

SMUD is unable to predict at this time the full impact that Order 1000 will have on the operations and finances of SMUD’s electric system or the electric industry generally. However, WestConnect has conducted planning cycles under its Order 1000 planning process and has not identified any project eligible for cost allocation. SMUD will continue to take any action necessary, including withdrawing from a cost allocation determination and engaging in FERC proceedings, to ensure that it is not required to pay for transmission costs in the absence of an agreement or service relationship.

Of note, on July 15, 2021, FERC issued an Advance Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator
Interconnection (the “ANOPR”). The ANOPR asks questions and seeks input on reforms that could impact the Order 1000 planning and cost allocation process. It is still early in the rulemaking proceeding, and FERC has not issued any further proposal. However, SMUD will continue to monitor and be engaged in any developments at FERC that impact the Order 1000 process and its participation in WestConnect.

NERC Reliability Standards. The Energy Policy Act (“EPAct”) of 2005 required the FERC to certify an electric reliability organization (“ERO”) to develop mandatory and enforceable reliability standards, subject to FERC review and approval. On February 3, 2006, FERC issued Order 672, which certified the NERC as the ERO. Many reliability standards have since been approved by FERC, including those aimed at protecting the bulk electric system from physical and cyber threats.

The ERO or the regional entities, such as the WECC, may enforce the reliability standards, subject to FERC oversight or the FERC may independently enforce reliability standards. Potential monetary sanctions include fines of up to $1,307,164 per violation per day. Order 693 provides the ERO and regional entities with the discretion necessary to assess penalties for such violations, while also having discretion to calculate a penalty without collecting the penalty if circumstances warrant. On March 18, 2010, FERC issued a Policy Statement on Penalty Guidelines, which appeared to envision the option of more serious penalties than would be imposed by NERC. NERC and a significant part of the industry challenged that Policy Statement. On September 17, 2010, FERC issued a Revised Policy Statement on Penalty Guidelines, which clarified and tempered some of its prior statements, although the revised guidelines maintained that it was appropriate to use the United States Criminal Sentencing Guidelines Model as an analytical tool for assessing penalties. FERC further clarified that its Revised Policy Statement on Penalty Guidelines would only be applied to investigations conducted by FERC.

Anti-Market Manipulation Rules. EPAct of 2005 gave the FERC the authority to issue rules to prevent market manipulation in jurisdictional wholesale power and gas markets, and in jurisdictional transmission and transportation services. These anti-market manipulation rules apply to non-jurisdictional entities such as SMUD. Further, EPAct of 2005 provided the FERC civil penalty authority, which the Commission has stated that it will exercise carefully by assuring that its market manipulation rules are clear.

Greenhouse Gas Emissions. The United States Environmental Protection Agency (the “EPA”) has taken steps to regulate GHG emissions under existing law. In 2007, the U.S. Supreme Court held that the Clean Air Act (“CAA”) directed EPA to regulate GHG emissions from new motor vehicles if it judged that such emissions contribute to climate change. In 2009, the EPA finalized an “Endangerment Finding” under the CAA, declaring that six identified GHGs – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – cause global warming, and that global warming endangers public health and welfare. Subsequently, EPA promulgated GHG standards for passenger cars and light-duty trucks (the so-called “Tailpipe Rule”).-Although that rulemaking was later withdrawn by a different administration, prompting litigation and re-proposal of the standards that has only recently been finalized, the original promulgation of the Tailpipe Rule required EPA to also address emissions of the same pollutants from other sources, namely, the electric sector.

In 2014, the EPA issued a proposed rule under section 111(d) of the CAA called the Clean Power Plan (the “CPP”) that projected power sector emissions reductions of 30% below 2005 levels by 2030. The proposed CPP would have established a rate-based emissions goal for each state, providing states the responsibility to develop a State Implementation Plan (“SIP”) describing how each will meet the goal assigned by EPA using the “Best System of Emissions Reduction” (“BSER”) established by EPA. The BSER under the CPP featured a suite of emissions reduction measures including fuel switching, emissions trading, and other measures. Significantly for the State and its regulated entities, the proposed CPP included a “state measures” plan that allowed for continued operation of successful state programs that achieve CPP goals. The rule was finalized in October 2015.
In November 2015, 27 states and numerous corporations challenged the CPP in court, alleging that EPA had exceeded its authority under the CAA. The U.S. Supreme Court stayed implementation of the CPP pending disposition of the petitions for review in the D.C. Circuit and any subsequent review by the U.S. Supreme Court. The D.C. Circuit Court of Appeals held oral arguments on the petitioner’s claims, but before the court issued a decision, the 2016 presidential election resulted in a change of administration.

The new administration quickly moved for an abeyance (or stay) of the case for as long as the agency needed to review and withdraw the CPP. The court issued a series of 60-day abeyances and ultimately dismissed the case on September 17, 2019. Meanwhile, in August 2018, the EPA proceeded to withdraw the CPP and proposed a different rule under the same provision of the CAA. The new rule, known as the Affordable Clean Energy (“ACE”) rule, would establish a BSER that only includes measures that can be undertaken at an individual power plant, rather than the broader suite of measures envisioned under the CPP. The ACE rule would also allow states to decide individually, on a case-by-case basis, the standards to be achieved by the best system of emission reductions, as well as exempt certain upgrades of fossil-fuel power plants from the CAA’s New Source Review program, and extend the time to implement SIPs after the ACE rule is finalized. The ACE rule was challenged in court by environmental groups and states alleging that the revised rule inadequately responds to the EPA’s responsibility to protect public health and welfare. SMUD joined in this litigation along with other challengers. The D.C. Circuit vacated the ACE rule on Jan. 19, 2021 and remanded it to EPA for review and revision, just days before a new presidential administration took office. Several states led by West Virginia and coal industry members appealed the decision, and the U.S. Supreme Court is expected to issue its ruling in the case later in 2022. The current administration is expected to issue a new rulemaking pending the U.S. Supreme Court’s ruling.

**Federal Clean Energy Legislation.** SMUD expects the 117th Congress may consider substantial legislation related to clean energy and carbon emissions. SMUD actively participates in dialogues at the federal level regarding legislation that would meaningfully alter SMUD’s existing GHG reduction strategies or impose new requirements for electric generators, including, but not limited to, discussions about a proposed federal clean energy standard.

SMUD is unable to predict with certainty at this time whether legislation will ultimately be considered or enacted, whether any new EPA rulemakings will be undertaken, and what the full impact of the reduction of fossil-based generation over time will have on the operations and finances of SMUD’s electric system or the electric utility industry generally.

**State Legislation and Regulatory Proceedings**

A number of bills affecting the electric utility industry have been enacted by the State Legislature. In general, these bills provide for reduced GHG emission standards and greater investment in energy efficient and environmentally friendly generation alternatives through more stringent RPS. Additionally, ongoing regulatory proceedings address water flow and quality issues related to the Sacramento – San Joaquin River Delta. The following is a brief summary of these bills and regulatory proceedings.

**Greenhouse Gas Emissions.** On June 1, 2005, the Governor of the State signed Executive Order S-03-05, which emphasized efforts to reduce GHG emissions by establishing statewide GHG reduction targets. The targets are: (i) a reduction to 2000 emissions levels by 2010; (ii) a reduction to 1990 levels by 2020; and (iii) a reduction to 80% below 1990 levels by 2050. The Executive Order also called for the California Environmental Protection Agency (“Cal/EPA”) to lead a multi-agency effort to examine the impacts of climate change on the State and develop strategies and mitigation plans to achieve the targets. On April 25, 2006, the Governor of the State signed Executive Order S-06-06 which directs the State to increase production of biofuels in the State and to meet 20% of its renewable energy goals in 2010 and 2020 using biomass resources.
On September 27, 2006, the Governor of the State signed into law AB 32, the Global Warming Solutions Act of 2006 (“AB 32”). AB 32 requires the California Air Resources Board (“CARB”) to adopt enforceable GHG emission limits and emission reduction measures in order to reduce GHG emissions to 1990 levels by 2020. In addition, AB 32 establishes a mandatory reporting program for all IOUs, local, publicly-owned electric utilities and other load-serving entities (electric utilities providing energy to end-use customers) (“LSEs”). The AB 32 reporting program allows CARB to adopt regulations using market-based compliance mechanisms such as a “cap-and-trade” system.

On December 16, 2010, CARB approved a resolution adopting cap-and-trade regulations for the State. The regulations became effective on January 1, 2012. As adopted, the cap-and-trade program covers sources accounting for 85% of the State’s GHG emissions, the largest program of its type in the United States.

The cap-and-trade program has been implemented in phases. The first phase of the program (through December 31, 2014) introduced a hard emissions cap on the combined electric utility and large industrial sectors, covering all sources emitting more than 25,000 metric tons of carbon dioxide-equivalent greenhouse gases (“CO2e”) per year. In 2015, the program was expanded to cover distributors of transportation, natural gas, and other fossil fuels. The cap declined about 2 percent in 2014, and declined 3 percent annually from 2015 to 2020. The cap-and-trade program requires covered entities to retire compliance instruments (allowances and carbon offsets) for each metric ton of CO2e they emit. Initially, CARB allocated free allowances to LSEs and most industrial facilities at roughly 90% of their average emissions. SMUD was granted a higher amount because of early action taken to reduce GHG emissions. In the case of electric utilities, the value of allowances must be used to benefit ratepayers and achieve GHG emission reductions. As the program matures, some covered entities will be required to buy an increasing portion of their allowances at auction or on the secondary market. The cap-and-trade program will also allow covered entities to use offset credits for compliance purposes (not exceeding 8% of a regulated entity’s compliance obligation). Offsets must be obtained from certified projects in sectors that are not regulated under the cap-and-trade program.

In November of 2012, CARB conducted its first allowance auction and auctions now occur on a quarterly schedule. On January 1, 2014, CARB linked the State cap and trade program with a companion program in the Canadian province of Quebec. The first quarterly joint auction for the linked programs occurred in November, 2014. On January 1, 2018, CARB linked the State’s cap-and-trade program with Ontario’s companion program. Immediately thereafter, an entity in any one of the three jurisdictions was able to purchase allowances on the secondary market in a linked jurisdiction, and as of February 21, 2018 (the date of the first joint auction) could purchase allowances in the joint auction. In June 2018, elections in Ontario changed political parties and the new administration formally withdrew from the Cap and Trade linkage. CARB has limited purchase and use of Ontario allowances in response. The August 2018 Cap and Trade auction did not include Ontario. The Washington state legislature recently passed a Cap and Trade bill, which will interact with the State’s markets. Future potential near-term links to the CARB cap-and-trade program also include the states of Oregon and New Mexico.

On October 7, 2015, the Governor of the State signed SB 350 that contained aggressive goals for reducing carbon emissions by 2030, including raising the proportion of renewable energy to 50%, reducing the use of petroleum fuel in cars and trucks by up to 50%, and doubling the energy efficiency of existing buildings. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Renewable Energy and Climate Change” for additional information. In addition, SB 350 established requirements for larger POUs to adopt (by January 1, 2019) and file with the CEC Integrated Resource Plans (“IRPs”) by April 2019 that would show planned procurement to achieve the 50% RPS and State GHG goals established by CARB. The CEC developed “guidelines” for these IRPs for POUs in 2017 and updated them in 2018. CARB established specific GHG target ranges for these IRPs in summer 2018, with SMUD’s planning
target set at 1.1 – 1.9 million metric tons of emissions. SMUD developed and adopted an IRP in 2018 through a comprehensive public process and filed the adopted IRP with the CEC on April 29, 2019. SMUD’s adopted IRP plans for a greater than 60% net reduction in GHG emissions by 2030 relative to 1990 levels, which equals approximately 1.3 million metric tons of GHG emissions. See “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Renewable Energy and Climate Change.”

On April 29, 2015, the Governor of the State signed Executive Order B-30-15, establishing a goal for the State to reduce GHG emissions to 40% below 1990 levels by 2030. In 2016, the State Legislature passed Senate Bill 32 (“SB 32”), which codified Governor Brown’s goal of reducing the State’s GHG emissions to 40% below 1990 levels by 2030. In 2017, the State Supreme Court resolved a final lawsuit, ruling that the Cap and Trade program was not a “fee” or “tax”, and hence a two-thirds legislative vote for AB 32 was not required. In 2017, the State Legislature passed Assembly Bill 398 (“AB 398”), explicitly authorizing the continuation of the cap and trade program, with designated changes, through 2030. Subsequently, CARB adopted an initial set of regulatory changes extending the Cap and Trade program, including establishing utility sector allowance allocations through 2030. In 2018, CARB completed a rulemaking to implement the cap and trade program changes designated by AB 398. These changes include development of a hard price ceiling for the cap and trade program and two price-containment points below that ceiling, in an attempt to ensure stable prices in the program. CARB adopted final regulations on December 13, 2018.

In addition, any new projects constructed in the State, including power plants, that may cause a significant adverse impact on the environment must be analyzed under CEQA. Some State agencies have begun using CEQA in novel ways to require mitigation of “significant” GHG emissions caused, either directly or indirectly, by a project. Pursuant to Senate Bill 97 passed in 2007, CARB will assist the Governor’s Office of Planning and Research in setting thresholds of significance under CEQA of GHG impacts from new projects. This is an area of State law that is evolving and untested in the courts. However, there is a risk that any project proponent of an electric system infrastructure project might have to mitigate such potential impacts to a level of less than significance.

On December 3, 2012, the Superior Court issued a ruling in Cleveland National Forest Foundation v. San Diego Association of Governments (“SANDAG”), Case No. 2100-00101593, that sided with the State Attorney General and the other petitioners stating that the SANDAG did not follow CEQA when it adopted a $257 billion regional transportation plan in 2011. The ruling expressly invalidated the certification of the Environmental Impact Report (“EIR”) on the grounds that the EIR should have analyzed the plan’s consistency with the governor’s policy goal to reduce GHG emissions by 80% by 2050 as articulated in the 2005 Executive Order S-03-05. On November 24, 2014, the Fourth Appellate District upheld the trial court in a published decision, and SANDAG appealed to the State Supreme Court. On July 13, 2017, the Supreme Court reversed and held that SANDAG’s decision not to adopt the 2050 goal was not an abuse of discretion. Nevertheless, the Court articulated three clear principles for agencies to follow in their CEQA review of planning documents: 1) agencies must take seriously the significance of even small increases in GHG emissions; 2) they must consider science-based State policy guidance in their decision-making; and 3) they are required to use the best scientific information available to determine whether their planning decisions are consistent with the State’s goals. These principles will apply to SMUD in CEQA reviews of future projects.

On September 29, 2006, the Governor of the State signed into law Senate Bill 1368 (“SB 1368”), the GHG Emissions Performance Standard (“EPS”). SB 1368 limits long-term investments in baseload generation by the State’s utilities to power plants that meet an EPS jointly established by the CEC and the CPUC. The agencies have set the EPS at 1,100 pounds CO2 per MWh, which is roughly half of the CO2 emissions rate of a conventional coal-fired power plant. CEC regulations to implement the law for POUs were approved by the Office of Administrative Law on October 16, 2007.
SMUD’s primary supply and demand-side resource needs to meet customers’ electricity usage patterns over the next 10 years are for peaking resources. Currently there is a ban in the State that prohibits the development of nuclear power plants until there is a permanent storage solution for spent fuel rods. With the effective ban on new coal power imports under SB 1368, natural gas-fired, combined cycle power plants would appear to be the primary viable option for fossil fuel based baseload power plant development absent the implementation of new technologies in connection with other resource options. The reliance on a single fuel source will continue to put pressure on the natural gas market in the United States. SMUD has in place a natural gas procurement plan to mitigate natural gas volatility, see “POWER SUPPLY AND TRANSMISSION – Fuel Supply” above.

Energy Efficiency.  Senate Bill 1037 (“SB 1037”), signed by Governor Schwarzenegger on September 29, 2005, requires that each municipal electric utility, including SMUD, prior to procuring new energy generation resources, first acquire all available energy efficiency, demand reduction and renewable resources that are cost effective, reliable and feasible. SB 1037 also requires each municipal electric utility to report annually to its customers and to the CEC its investment in energy efficiency and demand reduction programs. Further, State Assembly Bill 2021 (“AB 2021”), signed by the Governor on September 29, 2006 requires that the publicly owned utilities establish energy efficiency and demand reduction targets and report and explain the basis of the targets beginning June 1, 2007 and every three years thereafter for a ten year horizon. Future reporting requirements as set forth in AB 2021 include: (i) the identification of sources of funding for the investment in energy efficiency and demand reduction programs, (ii) the methodologies and input assumptions used to determine cost effectiveness, and (iii) the results of an independent evaluation to measure and verify energy efficiency savings and demand reduction program impacts. The information obtained from local publicly owned utilities will be used by the CEC to present the progress made by the publicly owned utilities on the State’s goal of reducing electrical consumption by 10% in ten years and amelioration with the GHG targets presented in Executive Order S-3-05 enacted by the Governor of the State on June 1, 2005.

In response to SB 1037 and AB 2021, SMUD established a specific goal of reducing energy consumption by 15% by 2018 and adopted annual targets for gigawatt hour and megawatt savings. SMUD revisits its energy efficiency goals and programs on a regular basis to ensure compliance with State policies established by SB 1037 and AB 2021 (as modified by SB 350).

SB 350 (passed in 2015) requires the CEC to develop statewide energy efficiency targets for 2030 aimed at doubling the achieved savings, and requires POUs to establish efficiency targets that are “consistent” with those targets. In 2017, the CEC developed a report on the doubling of energy efficiency targets required by SB 350. Both SB 350 and the CEC report contemplate the use of fuel substitution to meet energy efficiency targets and have a strong focus on carbon reduction. In response, SMUD developed a methodology and carbon tool to count fuel substitution, namely switching natural gas end-uses to efficient electric end uses and measuring savings in carbon emissions. SMUD presented its methodology to the joint state agency working group known as the Fuel Substitution Working Group several times in 2019 and adopted a carbon-based metric in early 2020 to guide overall SMUD carbon targets. This goal is expected to facilitate substantial expansion of building electrification and result in more than double the overall amount of energy efficiency being delivered per year, when measured on a carbon reduction basis. The vast majority of this energy efficiency (more than 85%) is expected to be delivered through efficient electrification by 2030.

Also passed in 2015 was AB 802. This bill directed the CEC to develop a State-wide building energy use benchmarking and public disclosure program for those buildings greater than 50,000 square feet. As set forth in regulations adopted by the CEC, building owners are required to report building characteristic information and energy use data each year. The reporting began in 2018 for buildings without
residential utility accounts and in 2019 for buildings with 17 or more residential utility accounts. Energy utilities must provide building-level energy use data to building owners upon request.

In order to support the implementation of SB 350 and AB 802, the CEC opened a rulemaking to amend its Title 20 Data Collection regulations, resulting in an expansion of customer data utilities must report to the CEC. The CEC adopted regulations pursuant to the rulemaking in February 2018, and the regulations were approved and went into effect in the Summer of 2018. SMUD has made several data filings under the new regulations. In 2020, the CEC opened a second phase of Data Collection rulemaking to amend regulations necessary to develop the policy reports and analysis as required by statue to assist in the CEC’s energy forecasting and assessment activities. The OAL approved the codifying of the regulations from that proceeding on December 30, 2021.

**Governor’s Zero Emission Vehicle Executive Orders**

Executive Order B-48-18, enacted January 2018, ordered all state entities to work with the private sector and all appropriate levels of government to put at least 5 million zero-emission vehicles on California roads by 2030, as well as 250,000 zero-emission vehicle chargers by 2025.

Executive Order N-79020 states the goal of 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035 and 100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations feasible.

Increases in zero-emission vehicle adoption and deployment will result in increased customer usage of electricity.

**Rooftop Solar Mandate.** In February, 2018, the CEC approved updates to the 2019 Title 24, Part 6, Building Energy Efficiency Standards to require installation of rooftop photovoltaic solar systems for residential buildings under three stories constructed starting in 2020, with an option to satisfy the requirement through community solar systems or energy storage. There is a “Community Solar” option for compliance with the mandate that permits a utility to provide solar power to the residential customers instead of rooftop solar, and SMUD submitted an application to the CEC for that option. The CEC approved SMUD’s Community Solar program, Neighborhood SolarShares, on February 20, 2020. In 2021, the CEC revised the Community Solar option in the 2022 Building Energy Efficiency Standards to include an “opt-out” provision, which will impact the design and implementation of SMUD’s Neighborhood SolarShares program. SMUD is updating our Neighborhood SolarShares program to incorporate the 2022 revisions, which take effect in January 2023. See also “BUSINESS STRATEGY – Serving SMUD’s Customers – Renewable Options.”

**Renewables Portfolio Standard.** Senate Bill 100 was passed by the Legislature and approved by Governor Brown on September 10, 2018. The bill sets a 50% RPS target for 2026 and sets compliance period targets at 44% by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. The bill also created a statewide planning goal to meet all of the state’s retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045. Along with SB 100, Governor Brown signed a new Executive Order that directs the State to achieve carbon neutrality by 2045 and net negative greenhouse gas emissions thereafter. The new goal of carbon neutrality by 2045 would be in addition to existing statewide targets of reducing greenhouse gas emission. By expanding the State’s carbon reduction goal, the State will also look to reduce carbon through sequestration in forests, soils and other natural landscapes.

**Advanced Clean Fleets Rule.** In September 2020, Governor Newsom signed Executive Order N-79-20 to accelerate actions to mitigate and adapt to climate change, and to more quickly move toward a
low-carbon, sustainable and resilient future. Executive Order (EO) N-79-20 set a goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035; and 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. In 2021, CARB released the proposed draft regulation for the Advanced Clean Fleets (the “ACF Rule”). The ACF Rule is part of a comprehensive strategy to achieve the mandates outlined in EO N-79-20 and includes requirements to achieve zero-emission truck and bus fleets significantly earlier for market segments such as public fleets, like SMUD. The ACF Rule introduces zero-emissions vehicle purchasing requirements starting in 2024 that will apply when SMUD adds vehicles to its fleet. This regulation is currently in the pre-rulemaking phase and is scheduled for adoption by the CARB Board in the fall of 2022.

**Load Management Standards.** Sections 25213, 25218(e) and 25403.5 of the Public Resources Code mandate and authorize the CEC to adopt rules and regulations to reduce the uneconomic and unnecessary consumption of energy and to manage energy loads, or demand, to help maintain electrical grid reliability. The original Load Management Standards (“LMS”) regulations were adopted in 1979 and required the implementation of marginal cost pricing industrial time-of-use rates, and residential load control programs. In 2020, the CEC proposed to update the LMS regulations to require the five largest electric utilities in California (including SMUD) to develop retail electricity rates that change at least hourly to reflect locational marginal costs and submit those rates to the utility’s governing body for approval. The LMS is currently in the formal rulemaking phase, with the 45-Day Language released in December 2021. The LMS proposes the following: a) voluntary hourly or sub-hourly rates for each customer class or b) a cost-effective program, to be implemented by the utilities by January 2026. The LMS was tentatively scheduled to be presented to the CEC for approval in May 2022, but the LMS presentation to the CEC was postponed and a new date has not been set. The effective date of the LMS regulation is expected to be January 2023, although this could be subject to change.

**Energy Storage Systems.** In September 2010, the State Legislature enacted, and the Governor signed into law, Assembly Bill 2514 (“AB 2514”). On or before March 1, 2012, the governing board of each POU was required to initiate a process to determine appropriate targets, if any, for the utility to procure viable and cost-effective energy storage systems to be achieved by December 31, 2016, and December 31, 2020. The bill required each POU to report certain information to the CEC. In 2014, SMUD set a 0 MW target for 2017, and in 2017 set a 9 MW target for 2020. In 2018, SMUD identified a potential need for 246 MW of storage by 2030. Following SMUD’s 2020 compliance report to the CEC in January 2021, going forward SMUD will evaluate and report energy storage planning as part of its IRP update every five years. The next update will be in 2023. See also “BUSINESS STRATEGY – Sustainable Power Supply and Transmission – Energy Storage Systems.”

**Sacramento-San Joaquin River Bay-Delta Processes.** The Sacramento-San Joaquin River Delta is an expansive inland estuary, formed at the western edge of the California Central Valley by the confluence of the Sacramento and San Joaquin rivers (“Delta”). There are two substantial Delta planning processes with the potential to affect (1) energy available for SMUD’s purchase from the Central Valley Project (“CVP”) and (2) flows within the Upper American River watershed. These processes are called the Bay-Delta Water Quality Control Plan (“Bay-Delta Plan”) and the Delta Conveyance Project.

The Bay-Delta Water Quality Control Plan is updated periodically by the State Water Resources Control Board (“SWRCB”), the last time being in 2006. The current Bay-Delta Plan update process is being implemented in four phases. The first phase considered southern Delta water quality, with a significant focus on San Joaquin River tributaries. Phase 2, which is initially being addressed by a document under development by SWRCB staff, will address Sacramento River tributaries and various flow related issues, including the critically important one of those tributaries’ contribution to Delta outflow. Phase 3 will concern changes to water rights needed to implement Phase 2. A substantial change in Delta
outflow requirements could have a major impact on the timing of hydroelectric energy generation by the CVP. SMUD has a long-term agreement with WAPA to purchase some of this power (see “POWER SUPPLY AND TRANSMISSION – Power Purchase Agreements – Western Area Power Administration”). On July 18, 2018, the SWRCB released an updated Framework document signaling its staff’s intent to propose Delta outflow requirements of 45–65% unimpaired flows for the Sacramento River tributaries (which includes the American River, the upper portions of which are where the UARP sits), though the report will analyze requirements of 35–75%. If these criteria were implemented, they could cut CVP generation by 50 to 63%. Governor Newsom has urged the SWRCB, other agencies and affected parties to execute voluntary agreements to address species’ needs and outflow requirements. Although the negotiations stalled during the last year of the Trump Administration the interested parties are expected to pursue them more vigorously since President Biden assumed office, though there is as yet no certainty that all affected parties will agree on terms. If the agreements do not come to fruition, SMUD plans to fully participate in all regulatory and legal proceedings to argue for consideration and minimization of impacts to hydropower generation. SMUD will assess the potential impacts of proposed modifications to the present outflow objectives on SMUD’s operations once the SWRCB makes those available.

On January 15, 2020, the State Department of Water Resources (“DWR”) announced it will prepare an Environmental Impact Report (“EIR”) to evaluate the potential impacts of carrying out the Delta Conveyance Project. The Project is expected to entail construction of two intakes on the Sacramento River that will carry water to a main tunnel to the California Aqueduct for delivery south of the Delta. The Project may pose the potential to exacerbate impacts to already imperiled aquatic species, and in turn could have indirectly prompted regulatory agencies to require third parties, such as SMUD, to compensate by making changes to their operations. SMUD will be actively involved in reviewing the draft EIR, the schedule for which has not been released, and any regulatory proceedings to ensure any impacts to SMUD interests are minimized.

**Proposition 26.** Proposition 26 was approved by the electorate on November 2, 2010 and amends Article XIII A and Article XIII C of the State Constitution. Proposition 26 imposes a two-thirds voter approval requirement for the imposition of fees and charges by the State, unless the fees and charges are expressly excluded. It also imposes a majority voter approval requirement on local governments with respect to fees and charges for general purposes, and a two-thirds voter approval requirement with respect to fees and charges for special purposes, unless the fees and charges are expressly excluded. The initiative, according to its supporters, is intended to prevent the circumvention of tax limitations imposed by the voters pursuant to Proposition 13, approved in 1978, and other measures through the use of non-tax fees and charges. Proposition 26 expressly excludes from its scope a charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable cost to the local government of providing the service or product. Proposition 26 is not retroactive as applied to local governments. Although SMUD believes that the initiative was not intended to apply to fees for utility services such as those charged by SMUD and its fees and charges meet the criteria of the exclusion described above, it is possible that Proposition 26 could be interpreted to further limit fees and charges for electric utility services and/or require stricter standards for the allocation of costs among customer classes. SMUD is unable to predict at this time how Proposition 26 will be interpreted by the courts or what its ultimate impact will be. As of the date of this Official Statement, SMUD is unaware of any fees or charges relating to SMUD’s service that would have to be reduced or eliminated because of Proposition 26.

**Wildfire Legislation.** In September 2016, Governor Brown signed into law Senate Bill 1028 (“SB 1028”), which requires POUs (including SMUD), IOUs, and electrical cooperatives to construct, maintain and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by electrical lines and equipment. SB 1028 also requires the governing board of POU’s to make an initial determination whether any portion of that geographical area has a significant risk of
catastrophic wildfire resulting from those electrical lines and equipment, based on historical fire data and local conditions, and in consultation with the fire departments or other entities responsible for control of wildfires within the geographical area.

Senate Bill 901 (“SB 901”), signed into law in September 2018 by Governor Brown, further addresses response, mitigation and prevention of wildfires. The bill requires POUs, including SMUD, before January 1, 2020, and annually thereafter, to prepare a wildfire mitigation plan and present it in a public meeting to their governing board. SB 901 requires POU’s to accept comments on the wildfire mitigation plan from the public, other local and State agencies, and interested parties, and to verify that the plan complies with all applicable rules, regulations, and standards, as appropriate. The bill requires a qualified independent evaluator to review and assess the comprehensiveness of its wildfire mitigation plan and present its report to the board in a public meeting.

In 2019, Governor Newsom released his comprehensive strategy on wildfires, laying the groundwork for legislative discussions on utility wildfire liability and allocating costs associated with catastrophic wildfires, among other things. While the Governor supported a modification of State’s current inverse condemnation doctrine, under which utilities are held liable for wildfire damage without regard to the fault of the utility, no bill was introduced. AB 1054 (Holden) did pass in 2019 that included several provisions for solvent investor owned utilities, including the development of a fund to help pay victim claims for utility ignited wildfires. The bill also created a new Wildfire Safety Division within the CPUC to prioritize wildfire safety throughout the State, and established an appointed Wildfire Safety Advisory Board to advise and make recommendations relating to wildfire safety to this new Division. For POUs, the bill requires submittal of annual wildfire mitigation plans to the Advisory Board for review and advisory opinions.

Senate Bill 247 (“SB 247”), signed by Governor Newsom on October 2, 2019, establishes notification, audit and reporting guidelines for electrical corporations relating to vegetation management requirements in the wildfire mitigation plan. SB 247 also specifies the qualifications for electrical line clearance tree trimmers performing work to comply with the vegetation management requirements in an electrical corporation’s wildfire mitigation plan and requires that qualified line clearance tree trimmers be paid no less than a specified prevailing wage rate. POUs are not required to adhere to SB 247, but the market impacts are projected to significantly increase SMUD’s annual vegetation management costs.

**Nonstock Security.** SMUD sponsored legislation in 2019, Assembly Bill 689, which was signed into law by Governor Newsom on September 5, 2019. This bill expressly allows SMUD the ability to operate a pilot project, of up to three acquisitions, to hold nonstock security in a corporation or other private entity if acquired as part of a procurement of goods or services from that entity, provided that no separate funding is expended solely for the nonstock security. This will allow SMUD to realize the financial benefits of its investments, partnerships, and intellectual property.

**Future Regulation**

The electric industry is subject to continuing legislative and administrative reform. States and Federal entities routinely consider changes to the way in which they regulate the electric industry. Recently, both further deregulation and forms of additional regulation have been proposed for the industry, which has been highly regulated throughout its history. SMUD is unable to predict at this time the impact any such proposals will have on the operations and finances of SMUD or the electric utility industry generally.
OTHER FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY

CAISO Market Initiatives

The CAISO has initiated a number of initiatives and stakeholder processes that propose certain operational and market changes. SMUD has mitigated the impact of certain CAISO initiatives by taking actions aimed at remaining independent from the CAISO market. Consequently, SMUD participates in the CAISO market for only a small percentage of energy needs (2-3%), and the remaining CAISO usage is discretionary (including EIM, described below). SMUD will continue to monitor the various initiatives proposed by the CAISO and participate in its stakeholder processes to ensure that its interests are protected.

Resource Adequacy Filing

In September 2005, the State Legislature enacted and the Governor signed into law Assembly Bill 380 (“AB 380”), which requires the CPUC to establish resource adequacy requirements for all LSEs within the CPUC’s jurisdiction. In addition, AB 380 requires publicly owned utilities, including SMUD, to meet the most recent resource adequacy standard as adopted by the WECC. In October 2005, the CPUC issued a decision stating that LSEs under its jurisdiction would be required, by June 2006, to demonstrate that they have acquired capacity sufficient to serve their forecast retail customer load plus a 15-17% planning reserve margin. In March 2021, the CPUC issued a decision requiring the three largest investor owned utilities (PG&E, Southern California Edison, and San Diego Gas & Electric) to target a minimum of 2.5% of incremental resources for their planning reserve margin for 2021 and 2022. Subsequently, in December 2021, the CPUC issued another decision that increased the investor-owned utilities’ minimum target by an additional 2.5-5% of incremental resources for 2022 (which creates an effective planning reserve margin of 20-22%) and extended this target to 2023. The WECC has yet to formally adopt a resource adequacy requirement. However, consistent with current WECC practices, SMUD utilizes a 15% planning reserve margin when assessing the need for future resources.

Energy Imbalance Market

Federal and state policymakers have long-promoted the development of organized markets in the west as a means (among other reasons) to better integrate intermittent renewable resources into the electric system, the first of which markets is the Western EIM, operated by the CAISO. The CAISO successfully launched the EIM, a real time only imbalance market, on October 1, 2014, with PacifiCorp as the first participant. Since this time, the EIM has grown significantly with the additions of NV Energy in 2015, Arizona Public Service and Puget Sound Energy in 2016, Portland General Electric in 2017, Idaho Power and Powerex in 2018, BANC (Phase 1) in 2019, the Salt River Project and Seattle City Light in 2020, BANC (Phase 2), the Turlock Irrigation District, the Los Angeles Department of Water and Power, NorthWestern Energy, and the Public Service Company of New Mexico in 2021, and Avista and Tacoma Power in early 2022. Additionally, the EIM footprint will continue to expand further in 2022 and 2023 with the additions of Tucson Electric Power and the Bonneville Power Administration later in 2022 and WAPA Desert Southwest Region and El Paso Electric in 2023. The EIM will number 22 participating Balancing Authority Areas by Spring of 2023.

To date, participation in the EIM by SMUD has shown significant financial and operational benefits, in addition to furthering an already favorable working partnership between SMUD and the CAISO to develop solutions to integrate renewable resources in support of carbon reduction goals.

BANC’s participation not only signaled the first public power participant in the EIM, but it was also implemented utilizing a unique phased approach, with SMUD (as the largest member of BANC) implementing in Phase 1 in 2019, while the other BANC members and WAPA (the “Phase 2 Parties”)...
would join after evaluation and approvals in 2021. Upon completion of the EIM Phase 2 “gap assessment” (done to determine what was incrementally required for other BANC members and WAPA to participate in the EIM along with SMUD), it was decided to proceed. The BANC Commission therefore approved BANC to move forward with BANC EIM Phase 2 implementation, and the other BANC members and WAPA began EIM participation under Phase 2 on March 25, 2021.

All of the BANC EIM Phase 2 participants independently obtained approvals from their own governing bodies and executed an agreement with BANC to participate in Phase 2. Part of their Phase 2 participation included reimbursement to SMUD for their respective shares of the upfront infrastructure costs incurred by SMUD in Phase 1 to establish BANC as an EIM Entity. This reimbursement to SMUD by the Phase 2 Parties has been completed.

The CAISO and EIM participants, including SMUD and BANC, have participated in a study and stakeholder process to examine the benefits and develop a design framework to extend the successful EIM real time framework to the CAISO’s day ahead market, referred to as the “extended day ahead market” or “EDAM.” Like EIM, EDAM would broaden the access to regional resources for the reliable integration of renewable resources, only over a longer (day ahead) time horizon. This longer timeframe will allow for a more economic and efficient optimization of regional resources by providing grid operators greater time (day ahead as opposed to real time) to commit or decommit units based on market price signals. Only participants in the EIM will be allowed to extend their participation to EDAM. The CAISO launched a public stakeholder initiative in February of 2020, but due to significant power supply disruptions which occurred in August 2020, the EDAM initiative was put on hold. The process, however, was restarted during the Summer of 2021 and the CAISO and stakeholders are developing a proposal. Should the stakeholder process produce a final EDAM framework and tariff and attract participants, it could be in place by 2024. SMUD will likely need to consider its participation, should an EDAM develop, sometime in 2023.

Community Choice Aggregation

State Assembly Bill 117 (2002) created Community Choice Aggregation by authorizing Community Choice Aggregators (“CCAs”) to aggregate customer electric load and purchase electricity for customers. CCAs can only be formed in IOU territory, and the IOU still transmits and delivers the power to customers, as well as provides metering, billing and customer service. A customer within the CCA territory is automatically “opted in” to the CCA program unless the customer takes affirmative action to receive electric service from the IOU. Various counties and cities in the State have formed CCAs, and many more are in the process of formation. The primary purposes of CCAs are local decision making and to provide greener electricity options for their respective community.

Valley Clean Energy Alliance (“VCE”) is a CCA formed in 2016 by the County of Yolo, the City of Davis, and City of Woodland. The City of Winters joined VCE in 2021. SMUD has for 70 years performed many of the same services required by CCAs and CCAs’ public power and clean energy objectives are in alignment with SMUD’s track record in these areas. SMUD has contracted with VCE as a service provider to support VCE’s data management, call center, power procurement, and technical energy service needs. The initial term of the contract is 5 years beginning May 2018.

SMUD has also contracted with East Bay Community Energy (“EBCE”) to provide call center and data management services for an initial term of three years beginning January 2018. EBCE is a joint powers agency formed in 2016 by the cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Oakland, Piedmont, San Leandro and Union City in Alameda County to implement a local CCA program. The cities of Pleasanton, Newark, and Tracy joined ECBE in 2021. SMUD and EBCE executed a contract extension through December 31, 2024.
Additionally, in June 2019, SMUD contracted with Silicon Valley Clean Energy (“SVCE”) for an initial term of two years, and the parties extended the contract until the end of 2022. Under this contract, SMUD provides program services that will help local SVCE communities reduce carbon pollution while delivering engaging customer experiences through promoting energy efficiency and grid integration, as well as electrifying transportation, buildings and homes. SVCE is a joint powers agency formed in 2016 by the cities of Campbell, Cupertino, Gilroy, Lost Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and Unincorporated Santa Clara County to implement a local CCA program.

SMUD management does not expect its current arrangements with VCE, EBCE, and SVCE to have a material adverse impact on SMUD’s financial position, liquidity or results of operations.

SMUD will assess the CCA market as it expands and determine whether new opportunities to assist other CCAs provide SMUD a net financial benefit.

See also “BUSINESS STRATEGY – Leveraging Core Competencies – Community Choice Aggregation.”

**PG&E Bankruptcy**

On January 14, 2019, PG&E and its parent company, PG&E Corporation, announced their intention to file, on or about January 29, 2019, for bankruptcy protection under Chapter 11 of the United States Bankruptcy Code (the “Bankruptcy Code”) mainly as a result of wildfire liability claims and exposure. On January 29, 2019, PG&E and PG&E Corporation filed for bankruptcy protection under Chapter 11 of the Bankruptcy Code (the “Bankruptcy Code”). On May 28, 2020, the CPUC approved PG&E’s Plan of Reorganization. On June 20, 2020 the United States Bankruptcy Court for the Northern District of California confirmed PG&E’s Plan of Reorganization. SMUD does not anticipate any material impacts to SMUD in connection with PG&E’s Plan of Reorganization.

In addition, other electric utilities, including the other major IOUs in the State, Southern California Edison and San Diego Gas & Electric Company, have experienced credit rating downgrades as a result of potential wildfire liabilities exposure, which may have implications for the electric market generally.

**Other Factors**

The electric utility industry in general has been, or in the future may be, affected by a number of other factors which could impact the financial condition and competitiveness of many electric utilities and the level of utilization of generating and transmission facilities. In addition to the factors discussed above, such factors include, among others, (a) effects of compliance with rapidly changing environmental, safety, licensing, regulatory and legislative requirements other than those described above; (b) changes resulting from conservation and demand side management programs on the timing and use of electric energy; (c) changes resulting from a national energy policy; (d) effects of competition from other electric utilities (including increased competition resulting from mergers, acquisitions, and “strategic alliances” of competing electric and natural gas utilities and from competitors transmitting less expensive electricity from much greater distances over an interconnected system) and new methods of, and new facilities for, producing low cost electricity; (e) the repeal of certain federal statutes that would have the effect of increasing the competitiveness of many IOUs; (f) increased competition from independent power producers and marketers, brokers and federal power marketing agencies; (g) “self-generation” or “distributed generation” (such as solar, microturbines and fuel cells) by industrial and commercial customers and others; (h) issues relating to the ability to issue tax exempt obligations, including severe restrictions on the ability to sell to nongovernmental entities electricity from generation projects and transmission service from...
transmission line projects financed with tax exempt obligations; (i) effects of inflation on the operating and maintenance costs of an electric utility and its facilities; (j) changes from projected future load requirements; (k) increases in costs and uncertain availability of capital; (l) issues relating to supply chains and the uncertain availability or increased costs of necessary materials; (m) shifts in the availability and relative costs of different fuels (including the cost of natural gas); (n) sudden and dramatic increases in the price of energy purchased on the open market that may occur in times of high peak demand in an area of the country experiencing such high peak demand, such as has occurred in the State; (o) issues relating to risk management procedures and practices with respect to, among other things, the purchase and sale of natural gas, energy and transmission capacity; (p) other legislative changes, voter initiatives, referenda and statewide propositions; (q) effects of changes in the economy; (r) effects of possible manipulation of the electric markets; (s) natural disasters or other physical calamities, including, but not limited to, earthquakes, droughts, severe weather, wildfires and floods; (t) changes to the climate, including increasing volatility in rainfall in the Western United States and a reduction in the depth and duration of the Sierra snowpack; (u) issues relating to cyber-security; and (v) outbreaks of infectious diseases or the occurrence of pandemics. Any of these factors (as well as other factors) could have an adverse effect on the financial condition of any given electric utility, including SMUD’s electric utility, and likely will affect individual utilities in different ways.

SMUD is unable to predict what impact such factors will have on the business operations and financial condition of SMUD’s electric system, but the impact could be significant. SMUD has taken major steps to mitigate the impacts of many of the changes. This Official Statement includes a brief discussion of certain of these factors. This discussion does not purport to be comprehensive or definitive, and these matters are subject to change subsequent to the date hereof. Extensive information on the electric utility industry is available from the legislative and regulatory bodies and other sources in the public domain, and potential purchasers of the [2022 Series J Bonds] should obtain and review such information.

[Remainder of Page Intentionally Left Blank]
APPENDIX B

2020 AND 2021 CONSOLIDATED FINANCIAL STATEMENTS
AND REPORT OF INDEPENDENT ACCOUNTANTS
APPENDIX C

BOOK-ENTRY SYSTEM

The information in this Appendix regarding DTC has been provided by DTC, and SMUD takes no responsibility for the accuracy or completeness thereof. SMUD cannot and does not give any assurances that DTC, DTC Participants or Indirect Participants will distribute the Beneficial Owners either (a) payments of interest or principal with respect to the 2022 Subordinated Bonds or (b) certificates representing ownership interest in or other confirmation of ownership interest in the 2022 Subordinated Bonds, or that they will so do on a timely basis or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Official Statement.

The Depository Trust Company (“DTC”) New York, NY, will act as securities depository for the 2022 Subordinated Bonds. The 2022 Subordinated Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered Bond certificate will be issued for the 2022 Subordinated Bonds in the aggregate principal amount of the 2022 Subordinated Bonds, and will be deposited with DTC.

DTC, the world’s largest depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues and money market instruments from over 100 countries that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has a Standard & Poor’s rating of AA+. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the 2022 Subordinated Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2022 Subordinated Bonds on DTC’s records. The ownership interest of each actual purchaser of each 2022 Subordinated Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2022 Subordinated Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their beneficial ownership interests in the 2022 Subordinated Bonds.
Subordinated Bonds, except in the event that use of the book-entry system for the 2022 Subordinated Bonds is discontinued.

To facilitate subsequent transfers, all 2022 Subordinated Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of the 2022 Subordinated Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2022 Subordinated Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such 2022 Subordinated Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the 2022 Subordinated Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2022 Subordinated Bonds, such as redemptions, tenders, defaults, and proposed amendments to the bond documents. For example, Beneficial Owners of the 2022 Subordinated Bonds may wish to ascertain that the nominee holding the 2022 Subordinated Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of the 2022 Subordinated Bonds are being redeemed, DTC’s practice is to determine by lot the amount of the interest of each Direct Participant in the 2022 Subordinated Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2022 Subordinated Bonds unless authorized by a Direct Participant in accordance with DTC’s MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to SMUD as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.’s consenting or voting rights to those Direct Participants to whose accounts the 2022 Subordinated Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium, redemption proceeds and interest payments on the 2022 Subordinated Bonds will be made to Cede & Co. or such other nominee as may be requested by an authorized representative of DTC. DTC’s practice is to credit Direct Participants’ accounts, upon DTC’s receipt of funds and corresponding detail information from SMUD or the Trustee, on a payment date in accordance with their respective holdings shown on DTC’s records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in “street name,” and will be the responsibility of such Participants and not of DTC, its nominee, the Trustee or SMUD, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, premium, redemption proceeds and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Trustee. Disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of the Direct and Indirect Participants.

A Beneficial Owner shall give notice to elect to have its 2022 Subordinated Bonds purchased or tendered, through its Participant, to the Underwriter, and shall effect delivery of such 2022 Subordinated Bonds by causing the Direct Participant to transfer the Participant’s interest in the 2022 Subordinated Bonds, except in the event that use of the book-entry system for the 2022 Subordinated Bonds is discontinued.
Bonds, on DTC’s records, to the Underwriter. The requirement of physical delivery of 2022 Subordinated Bonds in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the 2022 Subordinated Bonds are transferred by Direct Participants on DTC’s records and followed by a book-entry credit of tendered 2022 Subordinated Bonds to the Underwriter’s DTC account.

DTC may discontinue providing its services as depository with respect to the 2022 Subordinated Bonds at any time by giving reasonable notice to SMUD or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, bond certificates are required to be printed and delivered.

SMUD may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, bond certificates for such 2022 Subordinated Bonds will be printed and delivered to DTC.

Neither SMUD or the Trustee will have any responsibility or obligation to Participants, to Indirect Participants or to any Beneficial Owner with respect to (i) the accuracy of any records maintained by DTC, any Participant, or any Indirect Participant; (ii) the payment by DTC or any Participant or Indirect Participant of any amount with respect to the principal of or premium, if any, or interest on the 2022 Subordinated Bonds; (iii) any notice which is permitted or required to be given to Holders under the Resolution; (iv) the selection by DTC, any Participant or any Indirect Participant of any person to receive payment in the event of a partial redemption of 2022 Subordinated Bonds; (v) any consent given or other action taken by DTC as Bondholder; or (vi) any other procedures or obligations of DTC, Participants or Indirect Participants under the book-entry system.
APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION

The following is a summary of certain provisions of the Subordinate Resolution. Other provisions of the Subordinate Resolution are described under the caption “SECURITY FOR THE SUBORDINATED BONDS.” This summary is not to be considered a full statement of the terms of the Subordinate Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Subordinate Resolution.

Certain Definitions

“Assumed Interest Payments” means, for any fiscal year or period, interest which would accrue during such fiscal year or period on an amount equal to the then unamortized balance of the remaining sum of Assumed Principal Payments and at the interest rate on the date of such calculation on the Parity Subordinated Debt to which such Assumed Principal Payments relate.

“Assumed Interest Rate” for any Parity Bond or Parity Subordinated Debt means, for any fiscal year or period, the interest rate thereon on the date of such calculation.

“Assumed Principal Payments” means for any fiscal year or period the sum of the following amounts falling within such fiscal year or period: each Excluded Principal Payment amortized equally over the years (pro rata in the case of a partial year) in the period commencing on the stated due date for such Excluded Principal Payment and ending on the date 30 years from the date of issuance of the Parity Subordinated Debt to which such Excluded Principal Payment relates.

“Bond Debt Service” means all amounts required to be paid under the Subordinate Resolution from Net Revenues for principal, interest and reserve fund requirements on the Senior Bonds and all Parity Bonds then outstanding, as the same become due and payable.

“Defeasance Securities” shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of SMUD’s funds:

(i) any bonds or other obligations which as to principal and interest constitute direct obligations of, or are unconditionally guaranteed by, the United States of America, including obligations of any of the federal agencies set forth in clause (iii) below to the extent unconditionally guaranteed by the United States of America;

(ii) any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state (a) which are not callable prior to maturity or as to which irrevocable instructions have been given to the trustee of such bonds or other obligations by the obligor to give due notice of redemption and to call such bonds for redemption on the date or dates specified in such instructions, (b) which are secured as to principal and interest and redemption premium, if any, by a fund consisting only of cash or bonds or other obligations of the character described in the clause (i) above which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate, and (c) as to which the principal of and interest on the bonds and obligations of the character described in the clause (i) above which have been deposited in such fund along with any
cash on deposit in such fund are sufficient to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this clause (ii) on the maturity date or dates thereof or on the redemption date or dates specified in the irrevocable instructions referred to in subclause (a) of this clause (ii), as appropriate;

(iii) bonds, debentures, or other evidences of indebtedness issued or guaranteed by any agency or corporation which has been or may thereafter be created pursuant to an Act of Congress as an agency or instrumentality of the United States of America; and

(iv) with respect to the defeasance of any particular series of Bonds, any other securities specified in the Supplemental Resolution providing for their issuance.

“Electric System” and “Enterprise” means the entire electric system of SMUD, together with all additions, betterments, extensions and improvements to said system or any part thereof. The entire electric system of SMUD shall be deemed to be and to constitute a single unified and integrated system for the furnishing of electric energy to consumers of SMUD and a single enterprise. The terms “Electric System” and “Enterprise” shall have the same meaning and may be used interchangeably.

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity and under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Excluded Principal Payments” shall mean each payment of principal of Parity Subordinated Debt which the Board of Directors of SMUD determines (on a date not later than the date of issuance of such Parity Subordinated Debt) that SMUD intends to pay with moneys which are not Revenues. No such determination shall affect the security for such Parity Subordinated Debt or the obligation of SMUD to pay such payments from Revenues.

“Financial Products Agreement” means an interest rate swap, cap, collar, option, floor, forward or other hedging agreement, arrangement or security, however denominated, entered into by SMUD with a Qualified Provider not for investment purposes but with respect to specific Parity Bonds, Subordinated Bonds or Parity Subordinated Debt for the purpose of (1) reducing or otherwise managing SMUD’s risk of interest rate changes or (2) effectively converting SMUD’s interest rate exposure, in whole or in part, from a fixed rate exposure to a variable rate exposure, or from a variable rate exposure to a fixed rate exposure.

“Financial Product Payments” means payments periodically required to be paid to a counterparty by SMUD pursuant to a Financial Products Agreement. For the purpose of complying with any coverage test under the Subordinate Resolution, SMUD (or its consultant) may assume, with respect to any prospective Financial Product Payments that may adjust or vary pursuant to the terms of the related Financial Products Agreement, that the index or benchmark upon which the prospective Financial Product Payments are based shall be fixed for the prospective calculation period at the lesser of (a) the index or benchmark in effect as of the date of calculation, or (b) average rate of such index or benchmark over the most recent twelve calendar months preceding the date of calculation. If a twelve-month average index or benchmark as described in clause (b) is not calculable due to insufficient historic data or other reasons, SMUD (or its consultant) shall use the index or benchmark in effect as of the date of calculation.
“Financial Product Receipts” means amounts periodically required to be paid to SMUD by a counterparty pursuant to a Financial Products Agreement. For the purpose of complying with any coverage test under the Subordinate Resolution, SMUD (or its consultant) may assume, with respect to any prospective Financial Product Receipts that may adjust or vary pursuant to the terms of the related Financial Products Agreement, that the index or benchmark upon which the prospective Financial Product Receipts are based shall be fixed for the prospective calculation period at the lesser of (a) the index or benchmark in effect as of the date of calculation, or (b) average rate of such index or benchmark over the most recent twelve calendar months preceding the date of calculation. If a twelve-month average index or benchmark as described in clause (b) is not calculable due to insufficient historic data or other reasons, SMUD (or its consultant) shall use the index or benchmark in effect as of the date of calculation.

“Maintenance and Operation Costs” means, when used with respect to the Electric System, all actual maintenance and operation costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable, but only if said charges are made in conformity with generally accepted accounting principles, and exclusive in all cases of depreciation or obsolescence charges or reserves therefor, amortization of intangibles or other bookkeeping entries of a similar nature, and also exclusive of all interest charges and charges for the payment of principal, or amortization, of bonded or other indebtedness of SMUD.

Such maintenance and operation costs of the Electric System include, generally, purchased power (including power purchased from any special district included within the boundaries of SMUD), and such part of the cost of fuel of any type or character (including nuclear fuel), taxes, salaries and wages, fees for services, materials and supplies, rents, office supplies and all other costs as are charged directly or apportioned to the operation and maintenance of the generation, transmission and distribution system, customer accounts, sales and administrative functions, or to the general operation of SMUD. Said term does not include costs, or charges made therefor, for capital additions, replacements, betterments, extensions or improvements to or retirements from the Electric System, which under generally accepted accounting principles are properly chargeable to the capital account or the reserve for depreciation, and does not include losses from the sale, abandonment, reclassification, revaluation or other disposition of any properties of SMUD nor such property items, including taxes and fuel, which are capitalized pursuant to the then existing accounting practice of SMUD.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Subordinate Resolution.

“Net Subordinated Revenues” means Net Revenues less Bond Debt Service.

“Parity Bonds” includes the Senior Bonds and all revenue bonds issued on a parity with the Senior Bonds as provided or permitted in the Senior Bond Resolution. No Parity Bonds (other than the Senior Bonds) are currently outstanding.

“Parity Subordinated Debt” means the Subordinated Bonds and all revenue bonds of SMUD having an equal lien and charge upon Net Subordinated Revenues and therefore payable on a parity with the Subordinated Bonds and junior to the Parity Bonds.
“Qualified Provider” means any counterparty to a Financial Products Agreement if the unsecured long-term debt obligations of such counterparty (or of the parent or a subsidiary of such counterparty if such parent or subsidiary unconditionally guarantees the performance of such counterparty under such Financial Products Agreement and the Trustee receives an opinion of counsel to the effect that such guarantee is a valid and binding agreement of such parent or subsidiary), or obligations secured or supported by a letter of credit, contract, guarantee, agreement, insurance policy or surety bond issued by such counterparty (or such guarantor parent or subsidiary), are rated in one of the three highest rating categories of a national rating agency (without regard to any gradation of such rating category) at the time of the execution and delivery of the Financial Products Agreement.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from, the operation of the Electric System, or arising from the Electric System, including income derived from the sale or use of electric energy generated, transmitted or distributed by any facilities of the Electric System, together with any receipts derived from the sale of any property pertaining to the Electric System or incidental to the operation of the Electric System or from any services performed by SMUD in connection with or incidental to the Electric System, or from any other source whatsoever directly or indirectly derived from the Electric System, but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

The term “Revenues” also includes any income or revenues derived from the wholesale sale of water developed by the White Rock Project (as defined in Resolution No. 4775), or the Upper American River Project (as defined in Resolution No. 4938), but does not include revenues or income derived from the retail distribution of water through any distribution facility thereafter acquired by SMUD.

The term “Revenues” also includes all interest, profits or other income derived from the investment of any moneys in any fund or account established under the Subordinate Resolution or the Senior Bond Resolution.

Additional Covenants

The Subordinate Resolution contains the following additional covenants, among others:

(a) That the Electric System will be maintained in good repair, working order and condition at all times, and will be continuously operated in an efficient and economical manner.

(b) That SMUD will comply with all lawful orders of any governmental agency or authority having jurisdiction in the premises (except while the validity or application thereof is being contested in good faith).

(c) That proper records and accounts will be maintained of all transactions relating to the Electric System and the Revenues (open to inspection by the Trustee and the Holders of not less than 10 percent in principal amount of the Subordinated Bonds), to be audited annually by an independent certified public accountant within 90 days after close of the fiscal year, and copies of such financial statements supplied to Bondholders on request.

Tax Covenants

SMUD agrees in the Subordinate Resolution not to take any action which would result in interest on the 2022 Subordinated Bonds not being excluded from gross income for federal income tax purposes. SMUD also agrees to establish a separate Rebate Fund for the 2022 Subordinated Bonds and to deposit therein such amounts as are necessary to make the required rebate payments to the United States
Government under the Internal Revenue Code of 1986. Such deposits will be made from any Revenues legally available to SMUD after payment of maintenance and operation costs and Energy Payments, principal of and interest on the Parity Bonds, principal of and interest on the Subordinated Bonds, and any other obligations secured by the Revenues. Amounts in the Rebate Fund, and any earnings thereon, shall be paid to the United States Government as provided in the Tax Certificate.

Amendment of the Subordinate Resolution

The Subordinate Resolution and the rights and obligations of SMUD and of the Holders of the Subordinated Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the Holders of 60% in aggregate principal amount of the Subordinated Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Subordinated Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the Holder of each Subordinated Bond so affected, or (ii) reduce the aforesaid percentage of Subordinated Bonds required for consent to an amendment or modification, without the consent of the Holders of all the Subordinated Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Subordinate Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Subordinate Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a Series of Subordinated Bonds, subject to the provisions contained in the Subordinate Resolution with respect thereto.

Events of Default and Remedies of Bondholders

Events of Default. The Subordinate Resolution declares each of the following to be an event of default:

(a) Failure to pay the principal of and premium on any Subordinated Bond when due and payable;

(b) failure to pay any installment of interest on any Subordinated Bond when due and payable, if such default continues for a period of 30 days;

(c) if the principal of any Parity Bonds shall be declared to be due and payable on account of the occurrence of a default under or breach of the terms thereof or the Senior Bond Resolution or a similar instrument; and

(d) if, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

then and in each and every case during the continuance of such event of default, the Trustee or the Holders of not less than a majority in aggregate principal amount of the Subordinated Bonds at the time outstanding shall be entitled, upon notice in writing to SMUD, to declare the principal of all of the Subordinated Bonds then outstanding, and the interest accrued thereon, to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable, anything in the Subordinate Resolution or in the Subordinated Bonds contained to the contrary notwithstanding.
**Trustee to Represent Subordinated Bondholders.** The Trustee is appointed as trustee to represent the Subordinated Bondholders in the matter of exercising and prosecuting on their behalf such rights and remedies as may be available to such Holders under the provisions of the Subordinated Bonds and the Subordinate Resolution, as well as under the Act or other provisions of applicable law. Upon any default or other occasion giving rise to a right of the Trustee to represent the Subordinated Bondholders, the Trustee may take such action as may seem appropriate to it, and, upon the request in writing of the Holders of twenty-five percent (25%) in aggregate principal amount of the Subordinated Bonds then outstanding, which request shall specify such default or occasion and the action to be taken by the Trustee, and upon being furnished with indemnity satisfactory to it, the Trustee shall take such action on behalf of the Bondholders as may have been requested.

**Remedies.** In case one or more of the events of default shall happen, then and in every such case the Holder of any Subordinated Bond at the time outstanding shall be entitled to proceed to protect and enforce the rights vested in such Holder by the Subordinate Resolution by such appropriate judicial proceeding as such Holder shall deem most effectual to protect and enforce any such right, either by suit in equity or by action at law, whether for the specific performance of any covenant or agreement contained in the Subordinate Resolution, or in aid of the exercise of any powers granted in the Subordinate Resolution, or to enforce any other legal or equitable right vested in the Holders of Subordinated Bonds by the Subordinate Resolution or by law.

**Distribution of Assets.** Upon any distribution of assets of SMUD upon any dissolution, winding up, liquidation or reorganization of SMUD, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of creditors or any other marshalling of the assets and liabilities of SMUD or upon any acceleration of maturity of the Subordinated Bonds by declaration or otherwise,

(a) the holders of all Parity Bonds shall first be entitled to receive payment in full of the principal thereof (and premium, if any) and interest due thereon, or provision shall be made for such payment in cash, before the Holders of the Subordinated Bonds are entitled to receive any payment on account of the principal of (or premium, if any) or interest on the indebtedness evidenced by the Subordinated Bonds;

(b) any payment by, or distribution of assets of, SMUD of any kind or character, whether in cash, property or securities, to which the Holders of the Subordinated Bonds or the Trustee would be entitled except for the provisions of the Subordinate Resolution shall be paid or delivered by the person making such payment or distribution, whether a trustee in bankruptcy, a receiver or liquidating trustee or otherwise, directly to the holders of Parity Bonds or their representative or representatives or to the trustee or trustees under the Senior Bond Resolution or any similar instrument under which any instruments evidencing any of such Parity Bonds may have been issued, ratably according to the aggregate amounts remaining unpaid on account of the Parity Bonds held or represented by each, to the extent necessary to make payment in full of all Parity Bonds remaining unpaid after giving effect to any concurrent payment or distribution (or provision therefor) to the holders of such Parity Bonds; and

(c) in the event that, notwithstanding the foregoing, any payment by, or distribution of assets of, SMUD of any kind or character, whether in cash, property or securities shall be received by the Trustee or the Holders of the Subordinated Bonds before all Parity Bonds are paid in full, such payment or distribution shall be held in Trust for the benefit of, and shall be paid over to the holders of such Parity Bonds or their representative or representatives or to the trustee or trustees under the Subordinate Resolution or any similar instrument under which any instruments evidencing any of such Parity Bonds may have been issued, ratably as aforesaid, for application to the payment of all Parity Bonds remaining unpaid, ratable to each holder's proportionate share, as determined by the par value of the Parity Bonds held or represented by each, to the extent necessary to make payment in full of all Parity Bonds remaining unpaid after giving effect to any concurrent payment or distribution (or provision therefor) on account of the Parity Bonds, to the holders of such Parity Bonds; and
unpaid until all such Parity Bonds shall have been paid in full, after giving effect to any concurrent payment or distribution (or provision therefor) to the holders of such Parity Bonds.

**Discharge of Subordinate Resolution**

The Subordinate Resolution may be discharged by depositing with the Trustee in trust, moneys or Defeasance Securities, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Subordinated Bonds at or before their respective maturity dates.
APPENDIX E

SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION

The following is a summary of certain provisions of the Senior Bond Resolution. This summary is not to be considered a full statement of the terms of the Senior Bond Resolution and accordingly is qualified by reference thereto and is subject to the full text thereof. Capitalized terms not otherwise defined in this Official Statement shall have the meanings ascribed thereto in the Senior Bond Resolution.

Between July 1997 and August 2003, SMUD received consents to amend the Senior Bond Resolution from the owners of the requisite percentage of Outstanding Senior Bonds. Pursuant to the authority granted by such consents, SMUD amended the Senior Bond Resolution in October 2003 by adopting the Forty-Eighth Supplemental Resolution and the Forty-Ninth Supplemental Resolution. The following summary of the Senior Bond Resolution reflects such amendments.

Certain Definitions

“Energy Payments” means, when used with respect to the Electric System, all actual costs incurred, or charges made therefor, by SMUD in any particular fiscal year or period to which said term is applicable for purchased power (including power purchased from any special district included within the boundaries of SMUD), electric and thermal energy and capacity under contracts providing for payments by SMUD for electric or thermal energy or capacity whether or not such energy or capacity is delivered or capable of being delivered or otherwise made available to or received by or for the account of SMUD.

“Net Revenues” for any fiscal period means the sum of (a) the Revenues for such fiscal period plus (b) the amounts, if any, withdrawn by SMUD from the Rate Stabilization Fund for treatment as Revenues for such fiscal period, less the sum of (c) all Maintenance and Operation Costs for such fiscal period, (d) all Energy Payments for such fiscal period not included in Maintenance and Operation Costs for such fiscal period, and (e) the amounts, if any, withdrawn by SMUD from Revenues for such fiscal period for deposit in the Rate Stabilization Fund pursuant to the Senior Bond Resolution.

“Parity Bonds” includes the Senior Bonds and all revenue bonds issued on a parity with the Senior Bonds as provided or permitted in the Senior Bond Resolution. No Parity Bonds (other than the Senior Bonds) are currently outstanding.

“Revenues” means all charges received for, and all other income and receipts derived by SMUD from, the operation of the Electric System, or arising from the Electric System, including income derived from the sale or use of electric energy generated, transmitted or distributed by any facilities of the Electric System, together with any receipts derived from the sale of any property pertaining to the Electric System or incidental to the operation of the Electric System or from any services performed by SMUD in connection with or incidental to the Electric System, or from any other source whatsoever directly or indirectly derived from the Electric System, but exclusive in every case of any moneys derived from the levy or collection of taxes upon any taxable property in SMUD.

The term “Revenues” also includes any income or revenues derived from the wholesale sale of water developed by the White Rock Project (as defined in Resolution No. 4775), or the Upper American River Project (as defined in Resolution No. 4938), but does not include revenues or income derived from the retail distribution of water through any distribution facility thereafter acquired by SMUD. The term “Revenues” also includes all interest, profits or other income derived from the investment of any moneys in any fund or account established under the Senior Bond Resolution.
Allocation of Revenues

After making an allocation of Revenues to Maintenance and Operation Costs and to Energy Payments not included in Maintenance and Operation Costs, the Treasurer of SMUD is required (subject to the last paragraph of this section) to set aside, on an equal priority with sums set aside for all other Parity Bonds, Net Revenues as follows:

First: To the Electric Revenue Bond Interest Fund, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-fifth (1/5) of the aggregate amount of interest becoming due on the Senior Bonds on the next succeeding semiannual interest payment date, until an amount sufficient to meet said interest payment is accumulated.

Second: To the Electric Revenue Bond Redemption Fund, to be set aside in the Principal Account and Sinking Fund, respectively, in approximately equal monthly installments on or before the first day of each month, an amount equal to at least one-tenth (1/10) of the aggregate amount of principal becoming due on serial Senior Bonds and the aggregate minimum sinking fund payments required to be made with respect to term Senior Bonds during the next ensuing 12 months, until an amount sufficient to meet the principal and sinking fund requirements on all Senior Bonds outstanding is accumulated in said accounts, respectively.

Third: To the Electric Revenue Bond Reserve Fund, such amounts as any supplemental resolution authorizing the issuance of a series of Senior Bonds may require to build up and maintain said fund.

If interest on Senior Bonds of a series or maturity is payable more frequently than semiannually, the Treasurer of SMUD shall set aside out of Net Revenues in the Interest Fund such amounts as may be required to pay interest on the Senior Bonds of such series or maturity on each interest payment date at least one month prior to such interest payment date. Allocation to the Electric Revenue Bond Redemption Fund and Electric Revenue Bond Reserve Fund shall be made as set forth above.

All remaining Revenues, after making the foregoing allocations, will be available to SMUD for all lawful SMUD purposes. Such remaining Revenues will be used for the purpose of, among other things, making any required deposits to the Rebate Fund. See “Tax Covenants.”

Reserve Fund

The Electric Revenue Bond Reserve Fund is a parity reserve fund for the equal benefit of all Parity Bonds outstanding. Moneys in such fund (except any excess over the required balance which may be withdrawn and used for any SMUD use) shall be used solely for the purpose of making good any deficiency in any fund established for the payment of interest, principal or sinking fund payments pursuant to the Senior Bond Resolution or any resolution authorizing the issuance of any Parity Bonds.

The Electric Revenue Bond Reserve Fund is required to be maintained in an amount such that the amount in the combined reserve funds of all Parity Bonds then outstanding will at no time be less than the current annual interest requirements on all then outstanding Parity Bonds (except bonds for which payment has been provided in advance). If SMUD’s debt service ratio in any fiscal year (the ratio of Net
Revenues during said fiscal year to maximum annual debt service during the period of three fiscal years next following said fiscal year on all Parity Bonds then outstanding) shall fall below 1.40, there shall be set aside in the reserve funds from the first available Net Revenues not less than 15 percent of the total current monthly interest requirements of all Parity Bonds until the debt service ratio again exceeds 1.40, or until the aggregate amount on deposit in the reserve funds is equal to the maximum annual debt service on all Parity Bonds, whichever occurs first. The combined reserve funds cannot be required to exceed the maximum annual debt service on all outstanding Parity Bonds.

Rates and Charges

SMUD has covenanted in the Senior Bond Resolution to establish and at all times maintain and collect rates and charges for the sale or use of electric energy generated, transmitted, distributed or furnished by SMUD which, together with certain items of other income permitted under the Senior Bond Resolution, will yield Revenues at least sufficient, with respect to the ensuing 12 months, to pay and provide for all sums required for Maintenance and Operation Costs and Energy Payments not included in Maintenance and Operation Costs and, in addition, to provide an aggregate sum equal to at least 1.20 times the total amount required for the payment of principal and interest, together with any sinking fund or reserve fund payments, on all Parity Bonds, in each case during such 12 months.

SMUD has full power to establish rates and charges for all SMUD services, and the levels of such rates are not subject to review or regulation by any other governmental agency, either federal or state.

Limitations on Additional Obligations Payable from Revenues

The Senior Bond Resolution provides that SMUD will not, so long as any Senior Bonds are outstanding, issue any obligations payable in whole or in part from Revenues except the following:

(a) Senior Bonds of any series authorized pursuant to the Senior Bond Resolution;

(b) Refunding bonds issued solely to refund all or part of the Parity Bonds;

(c) General obligation bonds or other securities secured by the full faith and credit of SMUD;

(d) Additional revenue bonds (including additional Parity Bonds), payable on a parity with the Senior Bonds, with an equal lien and charge upon the Revenues, but only subject to the following conditions:

(1) Such additional revenue bonds shall have been authorized;

(2) The proceedings for the issuance of such additional revenue bonds shall require SMUD to fix and collect rates and charges in an amount not less, with respect to such bonds, than the amounts required with respect to Senior Bonds issued under the Senior Bond Resolution;

(3) SMUD shall not then be in default under the Senior Bond Resolution or other resolutions authorizing the issuance of Parity Bonds; and
(4) A certificate of SMUD, certifying--

(1) that the Net Revenues, after the completion of the additions, betterments, extensions or improvements proposed to be financed from the proceeds of such additional revenue bonds, will be sufficient to pay the principal of and interest (and bond reserve fund requirements, if any) on all Parity Bonds then outstanding and on such additional revenue bonds then proposed to be issued, and

(2) that the Net Revenues, for a period of twelve consecutive months during the twenty-four months immediately preceding the date upon which such additional revenue bonds will become outstanding, have been at least equal to 1.25 times the sum of

(i) the annual interest,
(ii) the principal amount of serial bonds falling due, and
(iii) the amount of minimum sinking fund payments required for the payment of term bonds,

as computed for the year in which such sum shall then be a maximum, including both the then outstanding Parity Bonds and the additional revenue bonds then proposed to be issued, provided that--

(A) if rates and charges in effect on the date upon which such additional revenue bonds will become outstanding will be greater than those in effect during the entire twelve months elected for the foregoing computation, then the Net Revenues for said period of twelve months may be augmented by 75% of the estimated increase in Net Revenues computed to accrue to the Electric System in the first twelve months during which such rates and charges shall be in effect; and

(B) if such additional revenue bonds or any thereof shall be issued for the purpose of acquiring an existing revenue-producing electric system, 75% of the estimated pro forma net revenues of such existing system (calculated on the basis of assumed SMUD ownership and operation during such period but otherwise on the basis of actual gross revenues of such existing system at the rates actually charged therefor) for the preceding twelve months may be added to the actual Net Revenues of the Electric System for the twelve months elected for said computation and treated as if actually received by the Electric System during those twelve months; and

(e) Revenue bonds junior and subordinate to the Parity Bonds.

Additional Covenants

The Senior Bond Resolution contains the following additional covenants, among others:

(a) SMUD will cause the Electric System to be maintained in good repair, working order and condition at all times, and will continuously operate the Electric System in an efficient and economical manner, and so that all lawful orders of any governmental agency or authority having jurisdiction in the premises shall be complied with, but SMUD shall not be required to comply with any such orders so long as the validity or application thereof shall be contested in good faith.

SMUD further covenants and agrees that it will at all times, while any of the Bonds are outstanding maintain and comply with all necessary permits and licenses issued by the Atomic Energy Commission.
(b) None of the electric energy owned, controlled or supplied by SMUD shall be furnished or supplied free, but on the contrary shall always be sold or furnished so as to produce Revenues.

If SMUD shall sell water developed or made available by the Electric System, a reasonable charge therefor shall be made and the revenue received by SMUD therefrom shall be Revenues and accounted for as such, except that SMUD may furnish water developed or impounded by the Electric System for any purpose (other than the use of such water for hydroelectric purposes) without charge as SMUD in its discretion deems advisable if such water is so furnished without any distribution cost to SMUD. SMUD may sell any water for consumption for domestic or other purposes (exclusive of the use thereof for hydroelectric purposes), but SMUD shall charge itself a reasonable wholesale rate for any water sold by SMUD. SMUD also may sell water at wholesale to any other person, for distribution by such other person for domestic or other purposes (except use for hydroelectric purposes), and SMUD shall likewise charge a reasonable wholesale rate to any such other person. In each case, all such wholesale rates shall be included in Revenues. The revenue received by SMUD from any retail sale of water distributed by SMUD shall not be deemed Revenues, but shall be available to SMUD for any SMUD purpose.

(c) That all taxes and governmental charges and other lawful claims which might become a lien on the Electric System or the Revenues or impair the security of the Senior Bonds will be paid and discharged when due.

(d) SMUD will not sell or otherwise dispose of any property essential to the proper operation of the Electric System or to the maintenance of the Revenues. SMUD will not enter into any lease or agreement which impairs or impedes the operation of the Electric System or which otherwise impairs or impedes the rights of the Bondholders with respect to Revenues. Nothing contained in the Senior Bond Resolution shall prevent SMUD from entering into sale and leaseback agreements pursuant to which SMUD may acquire the use of property subject to the terms of such sale and leaseback agreements.

(e) That insurance adequate in amounts and as to risks covered will be maintained against such risks as are usually insurable in connection with similar electric systems, and in addition public liability and property damage insurance in amounts not less than $1,000,000 per accident and adequate fidelity bonds on all officers and employees of SMUD handling or responsible for SMUD funds, subject in each case to the condition that such insurance is obtainable at reasonable rates and upon reasonable terms and conditions. See “Insurance” for a description of SMUD’s insurance.

(f) That the net proceeds realized by SMUD in the event all or any part of the Electric System is taken by eminent domain proceedings will be applied to the redemption or retirement of all Parity Bonds if sufficient therefor, and, if not, then pro rata to the redemption or retirement of Parity Bonds or to new facilities if the additional Revenues to be derived therefrom will sufficiently offset the loss of Revenues resulting from such eminent domain so that the ability of SMUD to meet its obligations will not be substantially impaired.

(g) That SMUD will at all times use its best efforts to maintain the powers, functions and duties now reposed in it pursuant to law.

(h) That SMUD will establish and at all times maintain and collect rates and charges for the sale or use of its electric energy sufficient to permit SMUD to purchase power or issue and sell Parity Bonds to finance additions, betterments, extensions and improvements to the Electric System as may be reasonably necessary to satisfy its then projected electric demand upon its Electric System, and that unless the Board determines that SMUD will be able to satisfy such demand through the purchase of electric energy, SMUD will proceed with all reasonable diligence to issue and sell such Parity Bonds.
Tax Covenants

SMUD agrees in the Senior Bond Resolution not to take any action which would result in interest on the Senior Bonds not being excluded from gross income for federal income tax purposes. SMUD also agrees to establish a separate Rebate Fund for the Senior Bonds and to deposit therein such amounts as are necessary to make the required rebate payments to the United States Government under the Internal Revenue Code of 1986. Such deposits will be made from any Revenues legally available to SMUD after payment of maintenance and operation costs and Energy Payments, principal of and interest on the Parity Bonds and any other obligations secured by the Revenues. Amounts in the Rebate Fund, and any earnings thereon, shall be paid to the United States Government as provided in the Tax Certificate.

Amendment of the Senior Bond Resolution

The Senior Bond Resolution and the rights and obligations of SMUD and of the Holders of the Senior Bonds may be modified or amended at any time pursuant to the affirmative vote at a meeting of Bondholders, or with the written consent without a meeting, of the Holders of 60 percent in aggregate principal amount of the Senior Bonds then outstanding, provided that no such modification or amendment shall (i) extend the fixed maturity of any Senior Bond, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon or reduce any premium payable upon the redemption thereof, without the consent of the Holder of each Senior Bond so affected, or (ii) reduce the aforesaid percentage of Senior Bonds required for consent to an amendment or modification, without the consent of the Holders of all the Senior Bonds then outstanding. Modifications or amendments may be made, without the consent of any Bondholders, to add covenants of SMUD or to surrender rights reserved by SMUD in the Senior Bond Resolution, to cure ambiguities or defective or inconsistent provisions or in regard to questions arising under the Senior Bond Resolution without adversely affecting the interests of the Bondholders, or to provide for the issuance of a Series of Senior Bonds, subject to the provisions contained in the Senior Bond Resolution with respect thereto.

Events of Default and Remedies of Bondholders

The Senior Bond Resolution declares each of the following to be an event of default:

(a) Failure to pay the principal of and premium on any Senior Bond when due and payable;

(b) Failure to pay any installment of interest on any Senior Bond when due and payable, if such default continues for a period of 30 days;

(c) Default by SMUD in the observance of any of the covenants, agreements or conditions on its part in the Senior Bond Resolution or in the Senior Bonds, if such default continues for a period of 60 days after written notice thereof (specifying such default and requiring the same to be remedied) has been given to SMUD by the Trustee, or to SMUD and the Trustee by the Holders of not less than 25 percent in aggregate principal amount of the Senior Bonds at the time outstanding; and

(d) If, under the provisions of any law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of SMUD or of the whole or any substantial part of its property, and such custody or control shall not be terminated or stayed within 60 days.

In the event of default, the Trustee or the Holders of not less than a majority in aggregate principal amount of the outstanding Senior Bonds may, upon written notice to SMUD, declare the principal of all outstanding Senior Bonds, and the interest accrued thereon, to be due and payable immediately. The Trustee is appointed as trustee to represent Bondholders and may take such action as
may seem appropriate to it, and, upon the written request of the Holders of 25 percent in aggregate principal amount of the outstanding Senior Bonds, and upon being furnished with indemnity satisfactory to it, will take such action on behalf of Bondholders as is specified in such written request. Each Bondholder is entitled to proceed to protect and enforce the rights vested in such Holder by the Senior Bond Resolution by such appropriate judicial proceedings as such Holder deems most effectual.

The rights of Bondholders are limited and restricted to the use and application of Revenues as provided in the Senior Bond Resolution and do not extend to the levy of any attachment or execution upon or forfeiture of any of the properties of SMUD or to any moneys derived by SMUD from the levy or collection of taxes.

In addition to the limitations on remedies contained in the Senior Bond Resolution, the rights and remedies provided by the Senior Bonds and the Senior Bond Resolution, as well as the enforcement by SMUD of contracts with customers of the Electric System, may be limited by and are subject to bankruptcy, insolvency, reorganization and other laws affecting the enforcement of creditors’ rights.

**Discharge of Senior Bond Resolution**

The Senior Bond Resolution may be discharged by depositing with the Trustee in trust, moneys or Federal Securities or general obligation bonds of the State of California, in such amount as the Trustee shall determine will, together with the interest to accrue thereon, be fully sufficient to pay and discharge the indebtedness on all Senior Bonds at or before their respective maturity dates.
Sacramento Municipal Utility District  
Sacramento, California  

Sacramento Municipal Utility District  
Subordinated Electric Revenue Refunding Bonds, 2022 Series C  
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the Sacramento Municipal Utility District (“SMUD”) in connection with the issuance of $______ aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “2022 Subordinated Bonds”), issued pursuant to Resolution No. 85-11-1 of the Board of Directors of SMUD, adopted November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted June 21, 2001 (the “Subordinate Master Resolution”), as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. 22-05-[__], adopted May 19, 2022 (the “Thirteenth Supplemental Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

In such connection, we have reviewed the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after original delivery of the 2022 Subordinated Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after original delivery of the 2022 Subordinated Bonds on the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. Our engagement with respect to the 2022 Subordinated Bonds has concluded with their issuance, and we disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Resolution and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the 2022 Subordinated Bonds to be included in gross income for federal income tax purposes.
We call attention to the fact that the rights and obligations under the 2022 Subordinated Bonds, the Resolution and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or to have the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement, dated ______, 2022, or other offering material relating to the 2022 Subordinated Bonds and express no opinion or conclusion with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The 2022 Subordinated Bonds constitute the valid and binding limited obligations of SMUD.

2. The Resolution, including the Thirteenth Supplemental Resolution, has been duly adopted by, and constitutes the valid and binding obligation of, SMUD. The Resolution creates a valid pledge, to secure the payment of the principal of and interest on the 2022 Subordinated Bonds, of the Net Subordinated Revenues, subject to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth in the Resolution.

3. Interest on the 2022 Subordinated Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Interest on the 2022 Subordinated Bonds is not a specific preference item for purposes of the federal alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2022 Subordinated Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP
APPENDIX G

FORM OF CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the “Disclosure Agreement”) is executed and delivered by the Sacramento Municipal Utility District (the “Issuer”) and U.S. Bank Trust Company, National Association in its capacity as Dissemination Agent (the “Dissemination Agent”) in connection with the issuance of $_________ aggregate principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “2022 Subordinated Bonds”). The 2022 Subordinated Bonds are being issued pursuant to the Issuer’s Resolution No. 85-11-1, adopted on November 7, 1985, as amended and restated by Resolution No. 01-06-10 (the “Subordinate Master Resolution”), as supplemented by supplemental resolutions, including Resolution No. 22-05-[-], adopted on May 19, 2022 (the “Thirteenth Supplemental Resolution”). The Subordinate Master Resolution and all supplemental resolutions, including the Thirteenth Supplemental Resolution, are collectively referred to herein as the “Subordinate Resolution.” Pursuant to Section 80.11 of the Subordinate Resolution, the Issuer and the Dissemination Agent covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Issuer and the Dissemination Agent for the benefit of the Holders and Beneficial Owners of the 2022 Subordinated Bonds and in order to assist the Participating Underwriters in complying with S.E.C. Rule 15c2-12(b)(5).

SECTION 2. Definitions. In addition to the definitions set forth in the Subordinate Resolution, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section 2, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Agreement.

“Beneficial Owner” shall mean any person which has or shares the power, directly or indirectly, to make investment decisions concerning ownership of any 2022 Subordinated Bonds (including persons holding Bonds through nominees, depositories or other intermediaries).

“Disclosure Representative” shall mean the Treasurer of the Issuer or his or her designee, or such other officer or employee as the Issuer shall designate in writing to the Trustee from time to time.

“Dissemination Agent” shall mean U.S. Bank Trust Company, National Association, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Trustee a written acceptance of such designation.

“EMMA” shall mean the MSRB’s Electronic Municipal Market Access system.

“Financial Obligation” shall mean, for purposes of the Listed Events set out in Section 5(a)(15) and Section 5(a)(16), a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term “Financial Obligation” shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.
“MSRB” shall mean the Municipal Securities Rulemaking Board.

“Participating Underwriter” shall mean any of the original underwriters of the 2022 Subordinated Bonds required to comply with the Rule in connection with offering of the 2022 Subordinated Bonds.

“Repository” shall mean the MSRB through EMMA or any other entity or system designated or authorized by the Securities and Exchange Commission to receive reports pursuant to the Rule.

“Rule” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

“State” shall mean the State of California.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than one hundred eighty (180) days after the end of the Issuer’s fiscal year (presently December 31), commencing with the report for the 2022 Fiscal Year, provide to each Repository an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Agreement. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Agreement; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report and later than the date required above for the filing of the Annual Report if they are not available by that date. If the fiscal year changes for the Issuer, the Issuer shall give notice of such change in the same manner as for a Listed Event under Section 5 hereof.

(b) Not later than fifteen (15) Business Days prior to the dates specified in subsection (a) for providing the Annual Report to each Repository, the Issuer shall provide its respective Annual Report to the Dissemination Agent. If by such date, the Dissemination Agent has not received a copy of the Annual Report from the Issuer, the Dissemination Agent shall contact the Issuer to determine if the Issuer is in compliance with the first sentence of this subsection (b).

(c) If the Dissemination Agent is unable to verify that an Annual Report of the Issuer has been provided to each Repository by the date required in subsection (a), the Dissemination Agent shall send a notice to each Repository and the MSRB (if the MSRB is not a Repository) in substantially the form attached as Exhibit A.

(d) The Dissemination Agent shall:

(1) determine each year prior to the date for providing the Annual Report the name and address of each Repository and the then-applicable rules and procedures for filing the Annual Report with each Repository, if any; and

(2) file a report with the Issuer certifying that the Annual Report has been provided pursuant to this Disclosure Agreement, stating the date it was provided and listing each Repository to which it was provided.

SECTION 4. Content of Annual Reports.

(a) The Issuer’s Annual Report shall contain or include by reference the following:
(1) The audited financial statements of the Issuer for the prior fiscal year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board and where not in conflict with the Financial Accounting Standards Board (“FASB”) pronouncements or accounting principles prescribed by FASB. If the Issuer’s audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(2) An update of the following types of information contained in Appendix A to the official statement, dated ______, 2022 and related to the 2022 Subordinated Bonds:

(i) The table entitled “Power Supply Resources.”

(ii) The table entitled “Projected Requirements and Resources to Meet Load Requirements.”

(iii) The table entitled “Average Class Rates” (to the extent such table relates to rates and revenues of the Issuer).

(iv) The table entitled “Selected Operating Data.”

(v) The table entitled “Unconsolidated Financial Data.”

(vi) The balance in the Decommissioning Trust Fund, the current estimate of decommissioning costs, the decommissioning costs to date, and the annual contribution level to the Decommissioning Trust Fund, all relating to the Rancho Seco Nuclear Power Plant.

(vii) The table entitled “Estimated Capital Requirements.”

(b) Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the Issuer or public entities related thereto, which have been submitted to each Repository or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Issuer shall clearly identify each such other document so included by reference.

SECTION 5. Reporting of Listed Events.

(a) Pursuant to the provisions of this Section 5, the Issuer shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the 2022 Subordinated Bonds not later than ten (10) business days after the occurrence of the event:

(1) principal and interest payment delinquencies;

(2) non-payment related defaults, if material;

(3) unscheduled draws on any applicable debt service reserves reflecting financial difficulties;

(4) unscheduled draws on credit enhancement reflecting financial difficulties;
(5) substitution of credit or liquidity providers, or their failure to perform;

(6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 TEB) or other material notices or determinations with respect to the tax status of the 2022 Subordinated Bonds or other material events adversely affecting the tax status of the 2022 Subordinated Bonds;

(7) modifications to rights of Bondholders, if material;

(8) bond calls, if material, and tender offers;

(9) defeasances;

(10) release, substitution or sale of property securing repayment of the 2022 Subordinated Bonds, if material;

(11) rating changes;

(12) bankruptcy, insolvency, receivership or similar event of the Issuer;

(13) the consummation of a merger, consolidation, or acquisition involving the Issuer or the sale of all or substantially all of the assets of the Issuer, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

(14) appointment of a successor or additional trustee or the change of name of the Trustee, if material;

(15) incurrence of a Financial Obligation of the Issuer, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Issuer, any of which affect Bondholders, if material; and

(16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Issuer, any of which reflect financial difficulties.

(b) For the purpose of the event identified in Section 5(a)(12), the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for the Issuer in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Issuer, or if such jurisdiction has been assumed by leaving the existing governmental body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Issuer.

(c) Whenever the Issuer obtains knowledge of the occurrence of a Listed Event, the Issuer shall as soon as possible determine if such event is required to be reported pursuant to this Section 5.
(d) If the Issuer has determined that such event is required to be reported pursuant to this Section 5, the Issuer shall promptly notify the Dissemination Agent in writing. Such notice shall instruct the Dissemination Agent to report the occurrence pursuant to subsection (e).

(e) If the Dissemination Agent has been instructed by the Issuer to report the occurrence of a Listed Event, the Dissemination Agent shall file a notice of such occurrence with the MSRB (if the MSRB is not a Repository) and each Repository.

SECTION 6. Termination of Reporting Obligation. The obligations of the Issuer and the Dissemination Agent under this Disclosure Agreement shall terminate upon the legal defeasance, prior redemption or payment in full of all of the 2022 Subordinated Bonds. If such termination occurs prior to the final maturity of the 2022 Subordinated Bonds, the Issuer shall give notice of such termination in the same manner as for a Listed Event under Section 5.

SECTION 7. Dissemination Agent; Filings.

(a) The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Issuer pursuant to this Disclosure Agreement. If at any time there is not any other designated Dissemination Agent, the Issuer shall be the Dissemination Agent. The initial Dissemination Agent shall be U.S. Bank Trust Company, National Association.

(b) Unless and until one or more different or additional Repositories are designated or authorized by the Securities and Exchange Commission, all filings with a Repository which are required by this Disclosure Agreement shall be filed with the MSRB through EMMA and shall be in an electronic format and accompanied by such identifying information as prescribed by the MSRB in accordance with the Rule.

SECTION 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Dissemination Agent may amend this Disclosure Agreement, and any provision of this Disclosure Agreement may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions of Sections 3(a), 4, or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the 2022 Subordinated Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the 2022 Subordinated Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (1) is approved by the Holders of 60% of the 2022 Subordinated Bonds, or (2) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or Beneficial Owners of the 2022 Subordinated Bonds.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Issuer shall describe such amendment in its next respective Annual Report, and shall include, as applicable, a
narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles from those described in Section 4(a)(1), on the presentation) of financial information or operating data being presented by the Issuer. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (1) notice of such change shall be given in the same manner as for a Listed Event under Section 5, and (2) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

**SECTION 9. Additional Information.** Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

**SECTION 10. Default.** In the event of a failure of the Issuer or the Trustee to comply with any provision of this Disclosure Agreement, the Trustee shall, at the request of any Participating Underwriter or the Holders of at least 25% aggregate principal amount of Outstanding Bonds and upon being indemnified to its satisfaction from and against any costs, liability, expenses and fees of the Trustee, including, without limitation fees and expenses of its attorneys, or any Holder or Beneficial Owner of the 2022 Subordinated Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer or the Dissemination Agent, as the case may be, to comply with its obligations under this Disclosure Agreement. A default under this Disclosure Agreement shall not be deemed an Event of Default under the Subordinate Resolution, and the sole remedy under this Disclosure Agreement in the event of any failure of the Issuer or the Dissemination Agent to comply with this Disclosure Agreement shall be an action to compel performance.

**SECTION 11. Duties, Immunities and Liabilities of Dissemination Agent.** The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement, and the Issuer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys’ fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent’s negligence or willful misconduct. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement and no implied duties for obligation shall be read into this Disclosure Agreement against the Dissemination Agent. The Dissemination Agent has no power to enforce nonperformance on the part of the Issuer. The Dissemination Agent shall be paid compensation by the Issuer for its services provided hereunder in accordance with its schedule of fees provided to the Issuer and all expenses, legal fees and costs of the Dissemination Agent made or incurred by the Dissemination Agent in the performance of its duties hereunder. The obligations of the Issuer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the 2022 Subordinated Bonds.

**SECTION 12. Notices.** Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:
To the Issuer: Sacramento Municipal Utility District
6201 S Street, MS B405
Sacramento, California 95817
Attention: Treasurer
Telephone: (916) 732-6509
Fax: (916) 732-5835

To the Dissemination Agent: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

To the Trustee: U.S. Bank Trust Company, National Association
Global Corporate Trust
One California Street, Suite 1000
San Francisco, California 94111
Telephone: (415) 677-3699
Fax: (415) 677-3769

The Issuer, the Dissemination Agent and the Trustee may, by giving written notice hereunder to the other person listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent. Unless specifically otherwise required by the context of this Disclosure Agreement, a party may give notice by any form of electronic transmission capable of producing a written record. Each such party shall file with the Trustee and Dissemination Agent information appropriate to receiving such form of electronic transmission.

SECTION 13. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriters and Holders and Beneficial Owners from time to time of the 2022 Subordinated Bonds, and shall create no rights in any other person or entity.
SECTION 14. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.


SACRAMENTO MUNICIPAL UTILITY DISTRICT

By_________________________________________
Treasurer

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
as Dissemination Agent

By_________________________________________
Authorized Officer

ACKNOWLEDGED:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Trustee

By: ________________________________
Authorized Officer
EXHIBIT A

NOTICE TO REPOSITORIES OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer: Sacramento Municipal Utility District
Name of Bond Issue: Subordinated Electric Revenue Refunding Bonds, 2022 Series C
Name of Borrower: Sacramento Municipal Utility District
Date of Issuance: ________, 2022

NOTICE IS HEREBY GIVEN that the Sacramento Municipal Utility District (the “Issuer”) has not provided an Annual Report with respect to the above-named Bonds as required by Section 80.11 of Resolution No. 22-05-[__], each adopted May 19, 2022, by the Issuer. [The Issuer anticipates that the Annual Report will be filed by ___________.]

Dated:_______________

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION,
on behalf of Sacramento Municipal Utility District

cc: Sacramento Municipal Utility District
SACRAMENTO MUNICIPAL UTILITY DISTRICT

$[PAR] Electric Revenue Refunding Bonds, 2022 Series J

______________

CONTRACT OF PURCHASE

______________

[SALE DATE]

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Dear Directors:

The undersigned Morgan Stanley & Co. LLC, BofA Securities, Inc., Barclays Capital Inc., Citigroup Global Markets Inc., Goldman Sachs & Co. LLC, and J.P. Morgan Securities LLC (herein collectively called the “Underwriters”), acting for and on behalf of themselves, offer to enter into this Contract of Purchase (the “Contract of Purchase”) with the Sacramento Municipal Utility District (the “District”) which, upon the District’s acceptance, will be binding upon the District and upon the Underwriters. Morgan Stanley & Co. LLC, has been duly authorized to execute this Contract of Purchase and to act hereunder by and based on representations made to it under an Agreement Among Underwriters dated _____, 2022 on behalf of the Underwriters as the Senior Managing Underwriter (the “Senior Underwriter”). This offer is made subject to the District’s acceptance on or before 5:00 p.m., Sacramento time, on the date hereof, and if not so accepted, will be subject to withdrawal by the Underwriters upon notice delivered to the District at any time prior to the acceptance hereof by the District.

1. Purchase, Sale and Delivery of the Bonds. (a) Subject to the terms and conditions and in reliance upon the representations, warranties and agreements herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the District, and the District hereby agrees to sell to the Underwriters, all (but not less than all) of the $[PAR] aggregate principal amount of the Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2022 Series J (the “Bonds”), dated [CLOSING DATE], bearing interest (payable on the dates set forth in the Official Statement (as hereinafter defined) of the District relating to the Bonds) in each year until maturity or earlier redemption at the rates per annum and maturing on the dates and in the amounts set forth in the Official Statement. The purchase price for the Bonds shall be

(b) The Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable as provided in, Resolution No. 6649, adopted by the Board of Directors of the District on January 7, 1971 (the “Master Resolution”), as heretofore amended and supplemented, including the amendments and supplements thereto made by Resolution No. [RESO NO.], adopted by the Board of Directors on [RESO DATE] (the “Sixty-Fifth Supplemental Resolution”). The Master Resolution, as supplemented and amended as described in this Contract of Purchase, is herein called the “Resolution.” The Bonds are authorized to be issued pursuant to applicable California law, including the Municipal Utility District Act (Sections 12850 to 12860 of the Public Utilities Code), the Revenue Bond Law of 1941 (Government Code Section 54300 et seq.), Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (section 53580 et seq.) and the Resolution. The Bonds will be special obligations of the District payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Resolution) of, the Net Revenues (as defined in the Resolution). The Bonds shall be payable and shall be subject to redemption as provided in the Resolution.

(c) The Bonds are being issued to (i) refund the Refunded Bonds (as defined in the Official Statement), and (ii) pay certain costs associated with the issuance of the Bonds. In connection with the refunding of the Refunded Bonds, the District expects to terminate an interest rate swap agreement that was executed in December of 2019 to hedge potential interest rate exposure relating to the future refunding of the Refunded Bonds. The District expects that it will receive a termination payment for the termination of the interest rate swap agreement. A portion of the proceeds of the Bonds, together with other available funds, will be deposited in an escrow fund established pursuant to an escrow agreement (the “Escrow Agreement”) between the District and the Trustee, in its capacity as Escrow Agent (in such capacity, the “Escrow Agent”).

(d) The District has heretofore delivered to the Underwriters copies of the Preliminary Official Statement dated [POS DATE], relating to the Bonds (the “Preliminary Official Statement”) in connection with the public offering of the Bonds. The Preliminary Official Statement was deemed final by the District as of the date thereof in accordance with paragraph (b)(1) of Rule 15c2-12 of the Securities and Exchange Commission (“Rule 15c2-12”), except for the information not required to be included therein under Rule 15c2-12.

(e) The District shall prepare and deliver to the Underwriters, as promptly as practicable, but in any event not later than two business days prior to the Closing Date (as defined below) or seven business days from the date hereof, a final official statement, with such changes and amendments as may be agreed to by the Underwriters, in such quantities as the Underwriters may reasonably request in order to comply with paragraph (b)(4) of Rule 15c2-12 and the rules of the Municipal Securities Rulemaking Board (“MSRB”) (such official statement, including the cover page and Appendices thereto, as the same may be supplemented or amended pursuant to paragraph (i) of Section 2 hereof, is herein referred to as the “Official Statement”). In addition, the District will provide, subject to customary disclaimers regarding the transmission of electronic copies, an electronic copy of the final Official Statement to the Underwriters in the currently required designated electronic format stated in MSRB Rule G-32 and the EMMA Dataport Manual

4875-3411-0493.4
The parties agree that the format in which the Preliminary Official Statement was delivered meets such electronic format requirements.

(f) Within one (1) business day after receipt of the Official Statement from the District, but by no later than the Closing Date, the Underwriters shall, at their own expense submit the Official Statement to EMMA (as defined below). The Underwriters will comply with the provisions of MSRB Rule G-32, including without limitation the submission of Form G-32 and the Official Statement and notify the District of the date on which the Official Statement has been filed with EMMA.

“EMMA” means the MSRB’s Electronic Municipal Market Access system, or any other electronic municipal securities information access system designated by the MSRB for collecting and disseminating primary offering documents and information.

“EMMA Dataport Manual” means the document(s) designated as such published by the MSRB from time to time setting forth the processes and procedures with respect to submissions to be made to the primary market disclosure service of EMMA by underwriters under Rule G-32(b).

(g) The District hereby ratifies, confirms and approves the use and distribution by the Underwriters prior to the date hereof of the Preliminary Official Statement and hereby authorizes the Underwriters to use and distribute the Official Statement, the Resolution, and this Contract of Purchase, and all information contained in each, and all other documents, certificates and statements furnished by the District to the Underwriters in connection with the transactions contemplated by this Contract of Purchase, in connection with the offer and sale of the Bonds.

The District will covenant pursuant to a Continuing Disclosure Agreement dated as of the date of the issuance of the Bonds (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association (the “Trustee”), to provide annual reports and certain notices as described in Appendix F of the Official Statement.

(h) The District agrees and acknowledges that: (i) the purchase and sale of the Bonds pursuant to this Contract of Purchase is an arm’s-length commercial transaction between the District and the Underwriters, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriters are and have been acting solely as principals and are not acting as the agents or fiduciaries of the District, (iii) the Underwriters have not assumed an advisory or fiduciary responsibility in favor of the District with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriters have provided other services or are currently providing other services to the District on other matters) and the Underwriters have no contractual obligation to the District with respect to the offering contemplated hereby except the contractual obligations expressly set forth in this Contract of Purchase and (iv) it has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

(i) At 8:00 A.M., Sacramento time, on [CLOSING DATE] or at such earlier or later time or date as shall be agreed upon by the Underwriters and the District (such time and date being herein referred to as the “Closing Date”), the District will deliver the Bonds to The Depository Trust Company, New York, New York (“DTC”), for the account of the Underwriters,
duly executed by the District, and the other documents herein mentioned; and the Underwriters will (i) accept such delivery and pay the purchase price of the Bonds as set forth in paragraph (a) of this Section by wire transfer in San Francisco, California to the order of the District. Delivery of the documents herein mentioned shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, 400 Capitol Mall, Suite 3000, Sacramento, California 95814, or such other place as shall have been mutually agreed upon by the District and the Underwriters, except that the Bonds shall be delivered at the offices of DTC in New York, New York or at such other place and in such manner as shall have been mutually agreed upon by the District and the Underwriters.

The Bonds shall be issued initially in fully registered book-entry eligible form (which may be typewritten) in the form of a single registered bond for each maturity of the Bonds, shall bear CUSIP numbers and shall be registered in the name of Cede & Co., as nominee of DTC.

2. **Representations, Warranties and Agreements of the District.** The District hereby represents, warrants to and agrees with the Underwriters that:

(a) The District is a political subdivision of the State of California duly organized and validly existing pursuant to the Municipal Utility District Act as contained in Public Utilities Code Section 11501 *et seq.* (the “Act”) and has, and at the Closing Date will have, full legal right, power and authority (i) to enter into this Contract of Purchase, the Escrow Agreement, and the Undertaking, (ii) to adopt the Resolution, (iii) to pledge the Net Revenues as set forth in the Resolution, (iv) to issue, sell and deliver the Bonds to the Underwriters pursuant to the Resolution as provided herein, (v) to acquire, construct, operate, maintain, improve and finance and refinance its Electric System (as defined in the Resolution) and conduct the business thereof as set forth in and contemplated by the Preliminary Official Statement and the Official Statement, and (vi) to carry out, give effect to and consummate the transactions contemplated by this Contract of Purchase, the Escrow Agreement, the Undertaking, the Resolution, and the Preliminary Official Statement and the Official Statement;

(b) The District has complied, and will at the Closing Date be in compliance, in all material respects, with the Act, the Resolution, and with the obligations in connection with the issuance of the Bonds on its part contained in the Resolution, the Escrow Agreement, the Bonds, the Act, the Undertaking and this Contract of Purchase;

(c) The District has duly and validly adopted the Resolution, has duly authorized and approved the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Undertaking and the Official Statement and has duly authorized and approved the performance by the District of its obligations contained in, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by, each of said documents and, at the Closing Date, the Bonds will have been validly issued and delivered, the Resolution, the Escrow Agreement, the Undertaking and this Contract of Purchase will constitute the valid, legal and binding obligations of the District enforceable in accordance with their respective terms (subject to the effect of, and restrictions and limitations imposed by or resulting from, (i) bankruptcy, insolvency, debt adjustment, moratorium, reorganization or other similar laws affecting creditors’ rights, and (ii) judicial discretion) and the Resolution will be in full force and effect;
(d) The District is not in breach of or in default under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States of America, or of any department, division, agency or instrumentality of either or any applicable court or administrative decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District is otherwise subject or bound which in any material way, directly or indirectly, affects the issuance of the Bonds or the validity thereof, the validity or adoption of the Resolution or the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Undertaking or the other instruments contemplated by any of such documents to which the District is a party, and the adoption of the Resolution and compliance with the provisions of each will not, as of the date hereof and as of the Closing Date, conflict with or constitute a breach of or default in any material way under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States, or of any department, division, agency or instrumentality of either or any applicable court or administrative rule or regulation, or any bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District or any of the property or assets of the Electric System (as defined in the Resolution) are otherwise subject or bound, and no event which would have a material and adverse effect upon the financial condition of the District has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a default or event of default by the District under any of the foregoing;

(e) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Resolution, the Undertaking and this Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, this Contract of Purchase, the Escrow Agreement, the Undertaking, the Bonds or the Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained;

(f) The Bonds, when issued and delivered in accordance with the Resolution and this Contract of Purchase and paid for by the Underwriters on the Closing Date as provided herein, will be validly issued and outstanding special obligations of the District enforceable against the District in accordance with their terms and entitled to all the benefits and security of the Resolution; and, upon the issuance and delivery of the Bonds, the Resolution will provide, for the benefit of the holders from time to time of the Bonds, a legally valid and binding pledge of and lien on Net Revenues pledged under the Resolution, as provided in and contemplated by the Resolution;
(g) The Preliminary Official Statement, as of its date and as of the date hereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(h) At the time of the District’s acceptance hereof and (unless the Official Statement is amended or supplemented pursuant to paragraph (i) of Section 2 hereof) at all times subsequent to the date of delivery thereof up to and including the Closing Date, the Official Statement will be true, correct, complete and final in all material respects and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(i) If, after the date of this Contract of Purchase and until 25 days after the end of the “underwriting period” (as defined in Rule 15c2-12), any event shall occur that might cause the Official Statement to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the District hereby covenants and agrees, to the extent it has knowledge of such event, to notify the Underwriters (and for the purposes of this clause to provide the Underwriters with such information as they may from time to time reasonably request), and, if in the opinion of the Underwriters and their counsel such event requires the preparation and publication of a supplement or amendment to the Official Statement, at its expense to supplement or amend the Official Statement in a form and manner approved by the Underwriters and furnish to the Underwriters a reasonable number of copies of such supplement or amendment. For purposes of this Contract of Purchase, the District may assume that the end of the “underwriting period” has occurred on the Closing Date unless the District is otherwise notified by the Underwriters on or prior to the Closing Date. If the Underwriters notify the District that the Closing Date is not the end of the “underwriting period”, then the Underwriters shall further notify the District of the date that is the end of the “underwriting period” (as defined in Rule 15c2-12);

(j) If the Official Statement is supplemented or amended pursuant to paragraph (i) of Section 2 of this Contract of Purchase, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the “underwriting period”, the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading;

(k) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened (i) in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, (ii) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of any of the Bonds, the application of the proceeds thereof in accordance with the Resolution, or the collection or application of Revenues (as defined in the Resolution) or the collection or application of the Net Revenues pledged to pay the principal of and interest on the Bonds under the Resolution or in any way contesting or affecting the validity or enforceability
of any of the Bonds, the Escrow Agreement, the Resolution, the Undertaking, this Contract of Purchase or any action of the District contemplated by any of said documents, (iii) which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, (iv) contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the District or its authority with respect to the Bonds, the adoption of the Resolution, or the execution and delivery of the Undertaking, the Escrow Agreement, or this Contract of Purchase, or any action of the District contemplated by any of said documents, and (v) which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor;

(l) The District will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Underwriters may reasonably request (i) to qualify the Bonds for offer and sale under the “Blue Sky” or other securities laws and regulations of such states and other jurisdictions of the United States as the Senior Underwriter may designate, and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the Bonds; provided that in connection therewith the District shall not be required to execute or file a general or special consent to service of process or qualify to do business in any jurisdiction and will advise the Senior Underwriter promptly of receipt by the District of any written notification with respect to the suspension of the qualification of the Bonds for sale in any jurisdiction or written notification of the initiation or threat of any proceeding for that purpose;

(m) The audited financial statements of the District for the years ending December 31, 2021 and December 31, 2020 heretofore delivered to the Underwriters and incorporated by reference in the Preliminary Official Statement and the Official Statement as Appendix B fairly present the financial position of the District as of the dates indicated and such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis;

(n) Between the date hereof and the Closing Date, the District will not, without the prior written consent of the Senior Underwriter, offer or issue any bonds, notes or other obligations for borrowed money, or incur any material liabilities, direct or contingent, nor will there be any adverse change of a material nature in the financial position, results of operations or condition, financial or otherwise, of the District, in either case other than in the ordinary course of its business or as disclosed in the Preliminary Official Statement or the Official Statement or as otherwise disclosed to the Senior Underwriter;

(o) The Bonds, the Escrow Agreement, the Resolution and the Undertaking conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement;

(p) The District has the legal authority to apply and will apply, or cause to be applied, the proceeds from the sale of the Bonds as provided in and subject to all of the terms and provisions of the Resolution and as described in the Preliminary Official Statement and the Official
Statement, including for payment of District expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 7 (Expenses), and will not take or omit to take any action which action or omission will adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds;

(q) Any certificate signed by any official of the District, and delivered to the Underwriters, shall be deemed a representation and warranty by the District to the Underwriters as to the statements made therein; and

(r) Except as disclosed in the Preliminary Official Statement and the Official Statement, during the last five years the District has complied in all material respects with all previous undertakings required by Rule 15c2-12.

3. **Conditions to the Obligations of the Underwriters.** The obligations of the Underwriters to accept delivery of and pay for the Bonds on the Closing Date shall be subject to the performance by the District of its obligations to be performed hereunder at or prior to the Closing Date and to the fulfillment of the following conditions:

(a) The representations, warranties and covenants of the District contained herein shall be true, complete and correct on the date hereof and as of the Closing Date as if made on the Closing Date;

(b) At the Closing Date, the Resolution shall have been duly adopted and shall be in full force and effect, and shall not have been repealed, amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters, and there shall have been taken in connection therewith, with the issuance of the Bonds and with the transactions contemplated thereby and by this Contract of Purchase, all such actions as, in the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel (“Bond Counsel”), shall be necessary and appropriate;

(c) At the Closing Date, the Official Statement shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters;

(d) At or prior to the Closing Date, the Underwriters shall have received copies of the following documents, in each case satisfactory in form and substance to the Underwriters:

   (1) The Official Statement executed on behalf of the District by its Chief Executive Officer and General Manager, any Member of its Executive Committee, its Treasurer, its Secretary or its Chief Financial Officer (each an “Authorized Representative”);

   (2) The Undertaking executed on behalf of the District by an Authorized Representative;

   (3) The Sixty-Fifth Supplemental Resolution, with only such supplements or amendments thereto as may have been agreed to by the Underwriters and certified by an authorized officer of the District under its seal as having been duly adopted by the District and as being in full force and effect, and the Resolution, certified by an authorized officer
of the District as being in full force and effect, with such supplements and amendments thereto adopted after the date hereof as may have been agreed to by the Underwriters;

(4) An opinion or opinions relating to the Bonds, dated the Closing Date and addressed to the District, of Bond Counsel, in substantially the form included in the Official Statement as Appendix E, together with a letter or letters of such Bond Counsel, dated the Closing Date and addressed to the Underwriters, to the effect that the foregoing opinion or opinions addressed to the District may be relied upon by the Underwriters to the same extent as if such opinion or opinions were addressed to them;

(5) An opinion or opinions, dated the Closing Date and addressed to the Senior Underwriter, of Bond Counsel, in substantially the form attached hereto as Exhibit E;

(6) An opinion, dated the Closing Date and addressed to the Senior Underwriter, of General Counsel to the District, in substantially the form attached hereto as Exhibit C;

(7) An opinion, dated the Closing Date and addressed to the Underwriters, of Nixon Peabody LLP, as counsel for the Underwriters (“Underwriters’ Counsel”), to the effect that (i) the Bonds are exempt from the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (ii) the Continuing Disclosure Agreement complies as to form in all material respects with the requirements of paragraph (b)(5) of the Rule applicable to the primary offering of the Bonds; and (iii) based upon the information made available to them in the course of their participation in the preparation of the Preliminary Official Statement and the Official Statement as counsel to the Underwriters and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement as counsel to the Underwriters and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, they do not believe that (A) the Preliminary Official Statement, as of its date and as of the date of the Contract of Purchase, and (B) the Official Statement as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except for the information relating to Cede & Co., DTC or the operation of the book-entry system, the Appendices to the Official Statement, except Appendices D, and F, and summaries thereof and references thereto, and other financial, accounting and statistical data included therein, as to all of which no view need be expressed); and (iii) with respect to such matters as the Underwriters may reasonably require;

(8) A certificate, dated the Closing Date, signed by an Authorized Representative of the District in substantially the form attached hereto as Exhibit D (but in lieu of or in conjunction with such certificate the Underwriters may, in its sole discretion, accept certificates or opinions of General Counsel to the District, or of other counsel acceptable to the Underwriters, that in the opinion of such counsel the issues raised in any pending or threatened litigation referred to in such certificate are without substance or that the contentions of all plaintiffs therein are without merit);
(9) The Escrow Agreement, executed by the District and the Escrow Agent;

(10) An acceptance of and agreement to the provisions of the Sixty-Fourth Supplemental Resolution executed by the Trustee under the Resolution in form and substance acceptable to the Underwriters;

(11) A tax certificate related to the Bonds in substance and form satisfactory to Bond Counsel;

(12) Ratings of the Bonds from S&P Global Ratings (“S&P”) of not less than “[AA (stable outlook)]” and from Fitch Ratings, Inc. (“Fitch”) of not less than “[AA (stable outlook)];

(13) A report of [__________], as verification agent (the “Verification Agent”) with respect to the sufficiency of amounts deposited pursuant to the Escrow Agreement and an opinion of Bond Counsel respecting the defeasance of the Refunded Bonds;

(14) An opinion of counsel to the Trustee/Escrow Agent, dated the Closing Date, addressed to the Underwriters, to the effect that (i) the Trustee/Escrow Agent is a national banking association duly organized and validly existing under the laws of the United States of America having full power and being qualified to enter into, accept and agree to the provisions of the Resolution and to enter into and perform the Undertaking, (ii) the Undertaking and the Escrow Agreement have been duly authorized, executed and delivered by the Trustee/Escrow Agent and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the valid and binding obligation of the Trustee/Escrow Agent enforceable in accordance with its terms, subject to laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors’ rights generally, to the application of equitable principals and to the exercise of judicial discretion in appropriate cases, and to enter into and perform the Undertaking and the Escrow Agreement, (iii) all approvals, consents and orders of any governmental authority or agency having jurisdiction in this matter that would constitute a condition precedent to the performance by the Trustee/Escrow Agent of its duties and obligations under the Resolution, the Escrow Agreement, and the Undertaking have been obtained and are in full force and effect, and (iv) the acceptance of the duties and obligations of the Trustee/Escrow Agent under the Resolution, the Escrow Agreement, and the Undertaking and the consummation of the transactions on the part of the Trustee/Escrow Agent contemplated therein, and the compliance by the Trustee/Escrow Agent, as applicable, with the terms, conditions and provisions of such document do not contravene any provisions of applicable law or regulation or any order or decree, writ or injunction or the Articles of Association or Bylaws of the Trustee/Escrow Agent, and, to the best knowledge of such counsel, will not require the consent under or result in a breach of or a default under, any resolution, agreement or other instrument to which the Trustee/Escrow Agent is a party or by which it may be bound;

(15) A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by DTC and the District; and
(16) Such additional legal opinions, certificates, instruments and other documents as the Underwriters may reasonably request to evidence the truth and accuracy and completeness, as of the date hereof and as of the Closing Date, of the District’s representations and warranties contained herein and of the statements and information contained in the Preliminary Official Statement or the Official Statement, and the due performance or satisfaction by the District at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the District in connection with the transactions contemplated hereby and by the Resolution and the Preliminary Official Statement or the Official Statement.

If any of the conditions to the obligations of the Underwriters contained in this Section or elsewhere in this Contract of Purchase with respect to the Bonds shall not have been satisfied when and as required herein, all obligations of the Underwriters hereunder with respect to the Bonds may be terminated by the Underwriters at, or at any time prior to, the Closing Date by written notice to the District.

4. Offering. The obligations of the District to sell and to deliver the Bonds on the Closing Date to the Underwriters shall be subject to the following conditions:

(a) The entire $[PAR] aggregate principal amount of the Bonds shall be purchased, accepted and paid for by the Underwriters on the Closing Date; and

(b) The District shall receive an Issue Price Certificate of the Senior Underwriter substantially in the form attached hereto as Exhibit F with respect to the Bonds.

5. Issue Price of the Bonds.

(a) The Senior Underwriter, on behalf of the Underwriters, agrees to assist the District in establishing the issue price of the Bonds and shall execute and deliver to the District at Closing an “issue price” or similar certificate substantially in the form attached hereto as Exhibit F, together with the supporting pricing wires or equivalent communications, with modifications to such certificate as may be deemed appropriate or necessary, in the reasonable judgment of the Senior Underwriter, the District and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

(b) [Except for the maturities set forth in Schedule A attached hereto.] the District will treat the first price at which 10% of each maturity of the Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test).

(c) [The Senior Underwriter confirms that the Underwriters have offered the Bonds to the public on or before the date of this Contract of Purchase at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in the final Official Statement. Schedule A sets forth, as of the date of this Contract of Purchase, the maturities, if any, of the Bonds for which the 10% test has not been satisfied and for which the District and the Senior Underwriter, on behalf of the Underwriters, agree that (i) the Senior Underwriter will retain all unsold Bonds of each maturity for which the 10% test has not been satisfied and not allocate any...
such Bonds to any other Underwriter and (ii) the restrictions set forth in the next sentence shall apply, which will allow the District to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Senior Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following.

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the Underwriters have sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Senior Underwriter shall promptly advise the District or the District’s municipal advisor when the Underwriters have sold 10% of that maturity of the Bonds to the public at [a price] that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

The District acknowledges that, in making the representation set forth in this subsection, the Senior Underwriter will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering-price rule, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, as set forth in the retail distribution agreement and the related pricing wires. The District further acknowledges that each Underwriter shall be solely liable for its failure to comply with its agreement regarding the hold the offering price rule and that no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement to comply with its agreement regarding the hold-the-offering-price rule as applicable to the Bonds.

(d) [The Senior Underwriter confirms that:

(1) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Senior Underwriter is a party) relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A)(ii) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (ii) comply with the hold-the-offering-price rule, if applicable, in each case if and for
so long as directed by the Senior Underwriter and as set forth in the related pricing wires, (B) promptly notify the Representative of any sales of the Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Bonds to the public (each such term being used as defined below) and (C) acknowledge that, unless otherwise advised by the Underwriter, dealer or broker-dealer, the Representative shall assume that each order submitted by the Underwriter, dealer or broker-dealer is a sale to the public; and

(2) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter or the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter or the Underwriter and as set forth in the related pricing wires.]

(e) The Underwriters acknowledge that sales of any Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(1) “public” means any person other than an underwriter or a related party,

(2) “underwriter” means (A) any person that agrees pursuant to a written contract with the District (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

(3) a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and
(4) “sale date” means the date of execution of this Contract of Purchase by all parties.

6. **Termination.** The Underwriters shall have the right to terminate their obligations under this Contract of Purchase to purchase, accept delivery of and to pay for the Bonds, if,

(a) between the date hereof and the Closing Date, the market price or marketability, or the ability of the Underwriters to enforce contracts for the sale, at the initial offering prices set forth in the Official Statement, of the Bonds have been materially adversely affected, in the judgment of the Underwriters, (evidenced by a written notice to the District terminating the obligation of the Underwriters to accept delivery of and pay for the Bonds), by reason of any of the following:

1. (x) any legislation which is (A) enacted by Congress, (B) favorably reported for passage to either House of the Congress of the United States by any Committee of such House to which such legislation has been referred for consideration, or (C) recommended to the Congress for passage by the President of the United States or the Treasury Department, but only, however, if the occurrence of any of the foregoing events is generally accepted by the municipal bond market as potentially affecting the federal tax status of the District, its property or income or the interest on its bonds or notes (including the Bonds), (y) any decision rendered by a court established under Article III of the Constitution of the United States or the Tax Court of the United States, or (z) a final order, ruling, regulation or official statement issued or made by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with the purpose or effect, directly or indirectly, of imposing federal income taxation upon such interest as would be received by the holders of the Bonds, or upon such revenues or other income of the general character expected to be received by the District; provided, however, that the enactment of legislation which only diminishes the value of, as opposed to eliminating the exclusion from gross income for federal income tax purposes will not give the Underwriters the right to terminate their obligations hereunder;

2. Legislation enacted (or resolution passed) by the Congress or a final order, ruling, regulation or official statement is issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the Bonds are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or are not exempt from qualification under, or other requirements of, the Trust Indenture Act of 1939, as amended, or that the issuance, offering or sale of the Bonds or obligations of the general character of the Bonds, including any or all underlying arrangements, as contemplated hereby or by the Preliminary Official Statement or the Official Statement, otherwise is or would be in violation of the federal securities laws as amended and then in effect;
(3) the outbreak or escalation of hostilities or the declaration by the United States of a national emergency or war or the occurrence of any other local, national or international calamity, crisis or event relating to the effective operation of the government of or the financial community in the United States or an escalation thereof, including, without limitation, a downgrade of the sovereign debt rating of the United States by any major credit rating agency or payment default on United States Treasury obligations;

(4) the declaration of a general banking moratorium by federal, New York or California authorities, or the general suspension of trading on the New York Stock Exchange or any other national securities exchange, or any material disruption in commercial banking or securities settlement or clearing services;

(5) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the Bonds or obligations of the general character of the Bonds or securities generally, or the material increase of any such restrictions now in force, including those relating to the net capital requirements of, the Underwriters;

(6) the adoption of any amendment to the federal or California Constitution, decision by any federal or California court, or enactment by any federal or California legislative body materially adversely affecting (i) the District or the right of the District to receive or to pledge any of the Net Revenues, or (ii) the validity or enforceability of this Contract of Purchase, the Bonds or the Resolution;

(7) the adoption of any amendment to the California Constitution, decision by any California court, or enactment by any California legislative body adversely affecting the exemption of state or local income tax upon such interest as would be received by the holders of the Bonds, or

(8) (i) a downgrading or suspension of any rating (without regard to credit enhancement) by Moody’s, S&P, or Fitch of any debt securities issued by the District, or (ii) there shall have been any official statement as to a possible downgrading (such as being placed on “credit watch” or “negative outlook” or any similar qualification) of any rating by Moody’s, S&P or Fitch of any debt securities issued by the District.

(b) an event occurs, or information becomes known, which, in the judgment of the Underwriters, makes untrue in any material respect any statement or information contained in the Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

7. Expenses. (a) Except as set forth in paragraph (b) of this Section, the Underwriters shall be under no obligation to pay, and the District shall pay, or cause to be paid, all expenses incident to the performance of the District’s obligations hereunder including, but not
limited to, the cost of word processing and reproducing, executing and delivering the Bonds to the Underwriters; the cost of preparation, printing (and/or word processing and reproducing), distribution and delivery of the Resolution; the cost of printing and distributing copies of the Preliminary Official Statement and the Official Statement in sufficient quantities for distribution in connection with the sale of the Bonds (including resales in the secondary market); the fees and disbursements of Bond Counsel; the fees and disbursements of Public Financial Management, Inc. for its services as Municipal Advisor to the District; the fees and disbursements of any other engineers, accountants, and any other experts or consultants retained in connection with the issuance of the Bonds; the fees and disbursements of the Trustee/Escrow Agent and Verification Agent; fees charged by the rating agencies for rating the Bonds; any advertising expenses; filing fees; CUSIP charges; or fees and expenses of any credit enhancement; expenses incurred by the Underwriters on behalf of the District relating to food, transportation or lodging for District staff members attending the bond pricing are to be reimbursed by the District through proceeds of the Bonds or available funds of the District (the District’s obligations in regard to these expenses survive if delivery of the Bonds fails due to one of the conditions set forth in Section 3 hereof or this Contract of Purchase is terminated pursuant to Section 6 hereof) and any other expenses not specifically enumerated in paragraph (b) of this Section incurred in connection with the issuance of the Bonds.

(b) The District shall be under no obligation to pay, and the Underwriters shall pay (from the expense component of the underwriting discount), the cost of preparation of the Agreement Among Underwriters and the letter of instructions relating thereto and this Contract of Purchase; the cost of wiring funds for the payment of the purchase prices of the Bonds; the fees and expenses of DTC incurred with respect to depositing the Bonds therewith; expenses to qualify the Bonds for sale under any “Blue Sky” laws; fees to the California Debt and Investment Advisory Commission; and all other expenses incurred by the Underwriters in connection with its public offering and distribution of the Bonds not specifically enumerated in paragraph (a) of this Section, including the fees and disbursements of Underwriters’ Counsel. Notwithstanding that the fees to the California Debt and Investment Advisory Commission are solely the legal obligation of the Underwriters, the District agrees to reimburse the Underwriters for such fees.

8. **Notices.** Any notice or other communication to be given to the District under this Contract of Purchase may be given by delivering the same in writing to Sacramento Municipal Utility District, at 6201 S Street, Sacramento, California 95817-1899; and any notice or other communication to be given to the Underwriters under this Contract of Purchase may be given by delivering the same in writing to Morgan Stanley & Co. LLC, 555 California Street, 21st Floor, San Francisco, CA 94104 [Attention: John Sheldon, Managing Director].

9. **Parties in Interest.** This Contract of Purchase is made solely for the benefit of the District and the Underwriters (including successors or assigns of any Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof. The term “successors and assigns” as used in this Section shall not include any purchaser of the Bonds, as such purchaser, from any of the several Underwriters.

10. **Survival of Representations and Warranties.** The representations and warranties of the District, set forth in or made pursuant to this Contract of Purchase, shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the closing on
termination of this Contract of Purchase and regardless of any investigations or statements as to the results thereof made by or on behalf of the Underwriters and regardless of delivery of and payment for the Bonds.

11. **Counterparts.** This Contract of Purchase may be executed in several counterparts, which together shall constitute one and the same instrument.

12. **California Law Governs; Venue.** The validity, interpretation and performance of this Contract of Purchase shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Contract of Purchase shall be brought, commenced or prosecuted in the County of Sacramento, California.

[remainder of page intentionally left blank]
13. **Entire Agreement.** This Contract of Purchase when accepted by you in writing as heretofore specified shall constitute the entire agreement between us.

14. **Effectiveness.** This Contract of Purchase shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by an authorized officer of the District and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,

MORGAN STANLEY & CO. LLC
BOFA SECURITIES, INC.,
BARCLAYS CAPITAL INC.
CITIGROUP GLOBAL MARKETS INC.
GOLDMAN SACHS & CO. LLC, and
J.P. MORGAN SECURITIES LLC

BY: MORGAN STANLEY & CO. LLC, as Senior Underwriter

[Signature page to Contract of Purchase]

Accepted: [SALE DATE]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: ________________________________
   Russell Mills
   Treasurer

[Signature page to Contract of Purchase]
Exhibit A

SACRAMENTO MUNICIPAL UTILITY DISTRICT

$[PAR] Electric Revenue Refunding Bonds, 2022 Series J

<table>
<thead>
<tr>
<th>Maturity (August 15)</th>
<th>Principal Amount</th>
<th>Interest Rate</th>
<th>Yield</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>4,875,341-0493.4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit B to the Contract of Purchase
(Official Statement)
Re: Sacramento Municipal Utility District
$[PAR] Electric Revenue Refunding Bonds, 2022 Series J

Ladies and Gentlemen:

This opinion is being delivered pursuant to Paragraph 3(d)(6) of the Contract of Purchase (the “Contract of Purchase”), dated [SALE DATE], between Morgan Stanley & Co. LLC, as Senior Managing Underwriter named therein (the “Senior Underwriter”), and the Sacramento Municipal Utility District (the “District”) relating to the above-captioned bonds (the “Bonds”).

As counsel to the District, I have reviewed (i) Resolution No. 6649 of the District, adopted on January 7, 1971, as amended and supplemented to date, including as amended and supplemented by Resolution No. [RESO NO.], adopted on [RESO DATE] (as so amended and supplemented, the “Resolution”); (ii) the Continuing Disclosure Agreement, dated the date hereof (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association, as trustee (in such capacity, the “Trustee”); (iii) the Official Statement of the District, dated [SALE DATE] (the “Official Statement”) (iv) the escrow agreement, dated the date hereof (the “Escrow Agreement”), between the District and U.S. Bank Trust Company, National Association, as escrow agent (in such capacity, the “Escrow Agent”), and (v) such other documents, opinions and matters to the extent I deemed necessary to provide the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. I have assumed the genuineness of all documents and signatures presented to me (whether as originals or as copies) and the due and legal execution and delivery by, and validity against, any parties other than the District. I have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. I have further assumed compliance with all covenants and agreements contained in such documents.

I call attention to the fact that the rights and obligations under the Resolution, the Escrow Agreement, the Undertaking, and the Contract of Purchase may be subject to bankruptcy,
insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. I express no opinion with respect to any indemnification, contribution, choice of law, choice of forum or waiver provisions contained therein.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, I am of the opinion that:

1. The District is a political subdivision of the State of California duly organized and validly existing under the Act, as amended, and has full legal right, power and authority to execute and deliver (or adopt, as the case may be), and to perform its obligations under, the Resolution, the Escrow Agreement, the Undertaking and the Contract of Purchase.

2. The Contract of Purchase, the Escrow Agreement, and the Undertaking have been duly authorized, executed and delivered by the District, and, assuming due authorization, execution and delivery by each of the parties thereto other than the District, constitute the legal, valid and binding obligations of the District, enforceable against the District in accordance with their respective terms.

3. The District is not in breach of or default under any existing constitutional provision, applicable law or administrative regulation of the State of California or the United States or any applicable judgment or decree or any loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject which would have a material adverse effect on the financial condition or operations of the District, and no event has occurred and is continuing which with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which would have a material adverse effect on the financial condition or operations of the District; and the execution and delivery of the Bonds, the Escrow Agreement, the Undertaking and the Contract of Purchase and the adoption of the Resolution, and compliance with any existing constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject will not, as of the date hereof, conflict with or constitute a breach of or default under any such instrument which would have a material adverse effect on the financial condition or operations of the District, nor will any such execution, delivery, adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of the District or under the terms of any such law, regulation or instrument, except as expressly provided by the Bonds and the Resolution.

4. The statements contained in the Official Statement which purport to describe certain provisions of the Bonds, the Escrow Agreement, the Undertaking, and the Resolution present a fair and accurate summary of such provisions for the purpose of use in the Official Statement.
5. Except as described or referred to in the Preliminary Official Statement and the Official Statement, as of the date hereof, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the District affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of the Revenues (as defined in the Resolution) or the Net Revenues (as defined in the Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds or contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Resolution, the Escrow Agreement, the Contract of Purchase or the Undertaking, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Resolution, or the execution and delivery by the District of the Contract of Purchase, the Escrow Agreement, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act or the authorization, execution, delivery or performance by the District of the Bonds, the Resolution, the Escrow Agreement, the Undertaking, or the Contract of Purchase.

6. Based upon my review of the Preliminary Official Statement and the Official Statement as General Counsel to the District and without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement (except as specifically set forth in paragraph 4 hereof), I have no reason to believe that the statements contained in the Preliminary Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Preliminary Official Statement, and other financial and statistical data included therein, as to all of which I express no view) as of its date and as of the date of the Contract of Purchase contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Official Statement, and other financial and statistical data included therein, as to all of which I express no view) (A) as of the date of the Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or (B) as of the date hereof contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

For purposes of the opinions expressed herein, I have assumed that an agreement or other document is “material” to the District if it involves amounts in excess of $10,000,000 and that a matter would result in a “material adverse change” to the District if the financial consequences involved would exceed $10,000,000.
I understand that you are relying upon the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, with respect to the validity of the Bonds and the exclusion of interest on the Bonds from gross income for federal income tax purposes and the Bonds for purposes of State of California income taxation and, accordingly, render no opinion with respect thereto.

Very truly yours,
SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit D to the Contract of Purchase

CERTIFICATE

The Sacramento Municipal Utility District (the “District”), hereby certifies that:

(1) The representations and warranties of the District (excluding those representations and warranties contained in Section 2(e) and Section 2(k) of the hereinafter defined Contract of Purchase) contained in the Contract of Purchase, dated [SALE DATE], between the District and the Underwriters named therein (the “Contract of Purchase”) with respect to the sale by the District of $[PAR] aggregate principal amount of its Electric Revenue Refunding Bonds, 2022 Series J (the “Bonds”), are true and correct on and as of the Closing Date as if made on the Closing Date.

(2) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Resolution, the Escrow Agreement, the Undertaking, and the Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, the Contract of Purchase, the Escrow Agreement, the Undertaking, the Bonds or the Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained.

(3) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the best of knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened against the District, in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of any of the Bonds or the collection of the Revenues (as defined in the Resolution) or the Net Revenues (as defined in the Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds, or in any way contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Resolution, the

D-1
Contract of Purchase, the Escrow Agreement, the Undertaking, or any action of the District contemplated by any of said documents, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution system, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Resolution, or the execution and delivery by the District of the Contract of Purchase, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act of the authorization, execution, delivery or performance by the District of the Bonds, the Resolution, the Escrow Agreement, the Undertaking, or the Contract of Purchase, or any action of the District contemplated by any of said documents, or which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor.

(4) No event affecting the District has occurred since the date of the Official Statement which should be disclosed in the Official Statement so that the Official Statement will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and which has not been disclosed in a supplement or amendment to the Official Statement.

(5) The District has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof pursuant to the Contract of Purchase with respect to the issuance of the Bonds.

(6) All capitalized terms employed herein which are not otherwise defined shall have the same meanings as in the Contract of Purchase.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: _________________________________

Name: ________________________________

Title: _________________________________

Dated: [CLOSING DATE]
This letter is addressed to you, as Senior Underwriter, pursuant to Section 3(d)(5) of the Contract of Purchase, dated [SALE DATE] (the “Purchase Contract”), between you and the other underwriters named therein and the Sacramento Municipal Utility District (“SMUD”), providing for the purchase of $[PAR] principal amount of Sacramento Municipal Utility District Electric Revenue Refunding Bonds, 2022 Series J (the “Bonds”). The Bonds are being issued pursuant to Resolution No. 6649 of the Board of Directors of SMUD, adopted January 7, 1971, as supplemented and amended by later resolutions of said Board of Directors (as so supplemented and amended, the “Resolution”), including Resolution No. [RESO NO.], adopted on [RESO DATE]. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution or, if not defined in the Resolution, in the Purchase Contract.

In connection with our role as Bond Counsel to SMUD, we have reviewed the Purchase Contract; the Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; certain portions of the posted preliminary official statement of SMUD, dated [POS DATE], with respect to the Bonds (the “Preliminary Official Statement”) and of the posted official statement of SMUD, dated [SALE DATE], with respect to the Bonds (the “Official Statement”); opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to provide the opinions or conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the original delivery of the Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the original delivery of the Bonds on the date hereof. We have assumed the genuineness of all documents and signatures provided to us and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters
represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the Bonds, the Resolution, the Tax Certificate and the Purchase Contract and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or having the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions or conclusions:

1. The Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Resolution is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.

2. The Purchase Contract has been duly executed and delivered by, and is a valid and binding agreement of, SMUD.

3. The statements contained in the Official Statement under the captions “THE 2022 SERIES J BONDS” (excluding information relating to book-entry or The Depository Trust Company), “SECURITY FOR THE BONDS” and “TAX MATTERS” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTION” and APPENDIX E – “PROPOSED FORM OF LEGAL OPINION FOR 2022 SERIES J BONDS,” excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Resolution or set out the form and content of our final legal opinion as Bond Counsel to SMUD concerning the validity of the Bonds and certain other matters, dated the date hereof and addressed to SMUD, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of any of the statements contained in the Preliminary Official Statement or (except as explicitly stated in paragraph 3 above) in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. In our capacity as Bond Counsel to SMUD in connection with issuance of the Bonds, we participated in conferences with your representatives, your counsel, representatives of SMUD, its counsel, accountants, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which, with respect to the Preliminary Official
Statement, did not extend beyond the date of the Purchase Contract, and with respect to the Official Statement, did not extend beyond its date), and in reliance thereon, on oral and written statements and representations of SMUD and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as Bond Counsel to SMUD, we advise you as a matter of fact and not opinion that (a) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of the date of the Purchase Contract, based on the documents, drafts and facts in existence and reviewed as of that date, that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except any information marked as preliminary or subject to change, any information permitted to be omitted by Securities and Exchange Commission Rule 15c2-12 or otherwise left blank and any other differences with the information in the Official Statement), and (b) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained or contains any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no view or opinion, with respect to both the Preliminary Official Statement and the Official Statement, about any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any statements about compliance with prior continuing disclosure undertakings, any management discussion and analysis, any information about Cede & Co., The Depository Trust Company or book-entry, ratings, rating agencies, financial advisors, swap advisors, underwriters, underwriting and the information contained in Appendices B and C included or referred to therein or omitted therefrom. No responsibility is undertaken or view expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as Bond Counsel to SMUD. No attorney-client relationship has existed or exists between our firm and you in connection with the Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Senior Underwriter of the Bonds, is solely for your benefit as such Senior Underwriter in connection with the original issuance of the Bonds on the date hereof, and is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person. This letter is not intended to, and may not, be relied upon by owners of Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,
Exhibit F to the Contract of Purchase

(Form of Issue Price Certificate Of The Senior Underwriter Regarding Offering Prices)

SACRAMENTO MUNICIPAL UTILITY DISTRICT

$[PAR] Electric Revenue Refunding Bonds, 2022 Series J

The undersigned, on behalf of Morgan Stanley & Co. LLC, as representative (the “Representative”) of itself, BofA Securities, Inc., Barclays Capital Inc., Citigroup Global Markets Inc., Goldman Sachs & Co. LLC, and J.P. Morgan Securities LLC (together, the “Underwriting Group”), hereby certifies, on its own behalf and on behalf of the other members of the Underwriting Group on the basis of representations and warranties set forth in the agreement among underwriters, as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds).

1. **Sale of the [General Rule Maturities][Bonds].** As of the date of this Certificate, for each Maturity of the [General Rule Maturities][Bonds], the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A.

2. **[Initial Offering Price of the Hold-the-Offering-Price-Maturities.**

   (a) The Underwriting Group offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.

   (b) As set forth in the Bond Purchase Agreement for the Bonds, the Representative has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the unsold Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) unsold Bonds of the Hold-the-Offering-Price Maturities shall be retained by the Representative and not allocated to any of the other Underwriters. Pursuant to such agreement, the Representative has not offered or sold any unsold Bonds of any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.

3. **Defined Terms.**

   (a) **[General Rule Maturities** means those Maturities of the Bonds listed in Schedule A hereto as the “General Rule Maturities.”]

   (b) **[Hold-the-Offering-Price Maturities** means those Maturities of the Bonds listed in Schedule A hereto as the “Hold-the-Offering-Price Maturities.”]

   (c) **[Holding Period** means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day
after the Sale Date, or (ii) the date on which the Underwriters have sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.]

(d) **Issuer** means Sacramento Municipal Utility District.

(e) **Maturity** means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) **Public** means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a Related Party (as such terms are defined below) to an Underwriter.

(g) A purchaser of any of the Bonds is a **Related Party** to any Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(h) **Sale Date** means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [SALE DATE].

(i) **Underwriter** means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only, and as it relates to the actions of the other Underwriters, such representations are made to the best of the Representative’s knowledge based on the Representative’s records. Nothing in this certificate represents the Representative’s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Issuer, in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.
Dated: [CLOSING DATE]

Morgan Stanley & Co. LLC,
as representative of the Underwriting Group

By:_______________________________________
Name:_____________________________________

4875-3411-0493.4
### Schedule A

#### Sale Prices

$[PAR]$ Electric Revenue Refunding Bonds, 2022 Series J

<table>
<thead>
<tr>
<th>Maturity (August 15)</th>
<th>Principal Amount</th>
<th>Interest Rate</th>
<th>Yield</th>
<th>Price</th>
<th>Hold-the-Price Maturities</th>
<th>General Rule Maturities</th>
</tr>
</thead>
</table>
SACRAMENTO MUNICIPAL UTILITY DISTRICT
$[PAR] Subordinated Electric Revenue Refunding Bonds, 2022 Series C

________________________

CONTRACT OF PURCHASE

________________________

[SALE DATE]

Honorable Board of Directors
Sacramento Municipal Utility District
6201 S Street
Sacramento, California 95817-1899

Dear Directors:

The undersigned Morgan Stanley & Co. LLC, BofA Securities, Inc., Barclays Capital Inc., Citigroup Global Markets Inc., Goldman Sachs & Co. LLC, and J.P. Morgan Securities LLC (herein collectively called the “Underwriters”), acting for and on behalf of themselves, offer to enter into this Contract of Purchase (the “Contract of Purchase”) with the Sacramento Municipal Utility District (the “District”) which, upon the District’s acceptance, will be binding upon the District and upon the Underwriters. Morgan Stanley & Co. LLC, has been duly authorized to execute this Contract of Purchase and to act hereunder by and based on representations made to it under an Agreement Among Underwriters dated _____, 2022 on behalf of the Underwriters as the Senior Managing Underwriter (the “Senior Underwriter”). This offer is made subject to the District’s acceptance on or before 5:00 p.m., Sacramento time, on the date hereof, and if not so accepted, will be subject to withdrawal by the Underwriters upon notice delivered to the District at any time prior to the acceptance hereof by the District.

1. Purchase, Sale and Delivery of the Bonds. (a) Subject to the terms and conditions and in reliance upon the representations, warranties and agreements herein set forth, the Underwriters, jointly and severally, hereby agree to purchase from the District, and the District hereby agrees to sell to the Underwriters, all (but not less than all) of the $[PAR] aggregate principal amount of the Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “Bonds”), dated [CLOSING DATE], bearing interest (payable on the dates set forth in the Official Statement (as hereinafter defined) of the District relating to the Bonds) in each year until maturity or earlier redemption at the rates per annum and maturing on the dates and in the amounts set forth in the Official Statement. The purchase price for the Bonds shall be $[PURCHASE PRICE] (consisting of the principal amount of the Bonds of

(b) The Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable as provided in, Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001 (the “Subordinate Master Resolution”), as heretofore amended and supplemented, including the amendments and supplements thereto made by Resolution No. [RESO NO.], adopted by the Board of Directors on [RESO DATE] (the “Thirteenth Supplemental Resolution”). The Subordinate Master Resolution, as supplemented and amended as described in this Contract of Purchase, is herein called the “Subordinate Resolution.” The Bonds are authorized to be issued pursuant to applicable California law, including the Municipal Utility District Act (Sections 12850 to 12860 of the Public Utilities Code), the Revenue Bond Law of 1941 (Government Code Section 54300 et seq.), Article 11 of Chapter 3 of Part 1 of Division 2 of Title 5 of the California Government Code (section 53580 et seq.) and the Subordinate Resolution. The Bonds will be special obligations of the District payable exclusively from, and are secured by a pledge (effected in the manner and to the extent provided in the Subordinate Resolution) of, the Net Subordinated Revenues (as defined in the Subordinate Resolution). The Bonds shall be payable and shall be subject to redemption as provided in the Subordinate Resolution.

(c) The Bonds are being issued to (i) refund the Refunded Bonds (as defined in the Official Statement), and (ii) pay certain costs associated with the issuance of the Bonds. A portion of the proceeds of the Bonds, together with other available funds, will be deposited in an escrow fund established pursuant to an escrow agreement (the “Escrow Agreement”) between the District and the Trustee, in its capacity as Escrow Agent (in such capacity, the “Escrow Agent”).

(d) The District has heretofore delivered to the Underwriters copies of the Preliminary Official Statement dated [POS DATE], relating to the Bonds (the “Preliminary Official Statement”) in connection with the public offering of the Bonds. The Preliminary Official Statement was deemed final by the District as of the date thereof in accordance with paragraph (b)(1) of Rule 15c2-12 of the Securities and Exchange Commission (“Rule 15c2-12”), except for the information not required to be included therein under Rule 15c2-12.

(e) The District shall prepare and deliver to the Underwriters, as promptly as practicable, but in any event not later than two business days prior to the Closing Date (as defined below) or seven business days from the date hereof, a final official statement, with such changes and amendments as may be agreed to by the Underwriters, in such quantities as the Underwriters may reasonably request in order to comply with paragraph (b)(4) of Rule 15c2-12 and the rules of the Municipal Securities Rulemaking Board (“MSRB”) (such official statement, including the cover page and Appendices thereto, as the same may be supplemented or amended pursuant to paragraph (i) of Section 2 hereof, is herein referred to as the “Official Statement”). In addition, the District will provide, subject to customary disclaimers regarding the transmission of electronic copies, an electronic copy of the final Official Statement to the Underwriters in the currently required designated electronic format stated in MSRB Rule G-32 and the EMMA Dataport Manual (as defined below). The parties agree that the format in which the Preliminary Official Statement was delivered meets such electronic format requirements.
(f) Within one (1) business day after receipt of the Official Statement from the District, but by no later than the Closing Date, the Underwriters shall, at their own expense submit the Official Statement to EMMA (as defined below). The Underwriters will comply with the provisions of MSRB Rule G-32, including without limitation the submission of Form G-32 and the Official Statement and notify the District of the date on which the Official Statement has been filed with EMMA.

“EMMA” means the MSRB’s Electronic Municipal Market Access system, or any other electronic municipal securities information access system designated by the MSRB for collecting and disseminating primary offering documents and information.

“EMMA Dataport Manual” means the document(s) designated as such published by the MSRB from time to time setting forth the processes and procedures with respect to submissions to be made to the primary market disclosure service of EMMA by underwriters under Rule G-32(b).

(g) The District hereby ratifies, confirms and approves the use and distribution by the Underwriters prior to the date hereof of the Preliminary Official Statement and hereby authorizes the Underwriters to use and distribute the Official Statement, the Subordinate Resolution, and this Contract of Purchase, and all information contained in each, and all other documents, certificates and statements furnished by the District to the Underwriters in connection with the transactions contemplated by this Contract of Purchase, in connection with the offer and sale of the Bonds.

The District will covenant pursuant to a Continuing Disclosure Agreement dated as of the date of the issuance of the Bonds (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association (the “Trustee”), to provide annual reports and certain notices as described in Appendix F of the Official Statement.

(h) The District agrees and acknowledges that: (i) the purchase and sale of the Bonds pursuant to this Contract of Purchase is an arm’s-length commercial transaction between the District and the Underwriters, (ii) in connection therewith and with the discussions, undertakings and procedures leading up to the consummation of such transaction, the Underwriters are and have been acting solely as principals and are not acting as the agents or fiduciaries of the District, (iii) the Underwriters have not assumed an advisory or fiduciary responsibility in favor of the District with respect to the offering contemplated hereby or the discussions, undertakings and procedures leading thereto (irrespective of whether the Underwriters have provided other services or are currently providing other services to the District on other matters) and the Underwriters have no contractual obligation to the District with respect to the offering contemplated hereby except the contractual obligations expressly set forth in this Contract of Purchase and (iv) it has consulted its own legal, financial and other advisors to the extent it has deemed appropriate.

(i) At 8:00 A.M., Sacramento time, on [CLOSING DATE] or at such earlier or later time or date as shall be agreed upon by the Underwriters and the District (such time and date being herein referred to as the “Closing Date”), the District will deliver the Bonds to The Depository Trust Company, New York, New York (“DTC”), for the account of the Underwriters, duly executed by the District, and the other documents herein mentioned; and the Underwriters will (i) accept such delivery and pay the purchase price of the Bonds as set forth in paragraph (a)
of this Section by wire transfer in San Francisco, California to the order of the District. Delivery of
the documents herein mentioned shall be made at the offices of Orrick, Herrington & Sutcliffe LLP, 400 Capitol Mall, Suite 3000, Sacramento, California 95814, or such other place as shall have been mutually agreed upon by the District and the Underwriters, except that the Bonds shall be delivered at the offices of DTC in New York, New York or at such other place and in such manner as shall have been mutually agreed upon by the District and the Underwriters.

The Bonds shall be issued initially in fully registered book-entry eligible form (which may be typewritten) in the form of a single registered bond for each maturity of the Bonds, shall bear CUSIP numbers and shall be registered in the name of Cede & Co., as nominee of DTC.

2. Representations, Warranties and Agreements of the District. The District hereby represents, warrants to and agrees with the Underwriters that:

(a) The District is a political subdivision of the State of California duly organized and validly existing pursuant to the Municipal Utility District Act as contained in Public Utilities Code Section 11501 et seq. (the “Act”) and has, and at the Closing Date will have, full legal right, power and authority (i) to enter into this Contract of Purchase, the Escrow Agreement, and the Undertaking, (ii) to adopt the Subordinate Resolution, (iii) to pledge the Net Subordinated Revenues as set forth in the Subordinate Resolution, (iv) to issue, sell and deliver the Bonds to the Underwriters pursuant to the Subordinate Resolution as provided herein, (v) to acquire, construct, operate, maintain, improve and finance and refinance its Electric System (as defined in the Subordinate Resolution) and conduct the business thereof as set forth in and contemplated by the Preliminary Official Statement and the Official Statement, and (vi) to carry out, give effect to and consummate the transactions contemplated by this Contract of Purchase, the Escrow Agreement, the Undertaking, the Subordinate Resolution, and the Preliminary Official Statement and the Official Statement;

(b) The District has complied, and will at the Closing Date be in compliance, in all material respects, with the Act, the Subordinate Resolution, and with the obligations in connection with the issuance of the Bonds on its part contained in the Subordinate Resolution, the Escrow Agreement, the Bonds, the Act, the Undertaking and this Contract of Purchase;

(c) The District has duly and validly adopted the Subordinate Resolution, has duly authorized and approved the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Undertaking and the Official Statement and has duly authorized and approved the performance by the District of its obligations contained in, and the taking of any and all action as may be necessary to carry out, give effect to and consummate the transactions contemplated by, each of said documents and, at the Closing Date, the Bonds will have been validly issued and delivered, the Subordinate Resolution, the Escrow Agreement, the Undertaking and this Contract of Purchase will constitute the valid, legal and binding obligations of the District enforceable in accordance with their respective terms (subject to the effect of, and restrictions and limitations imposed by or resulting from, (i) bankruptcy, insolvency, debt adjustment, moratorium, reorganization or other similar laws affecting creditors’ rights, and (ii) judicial discretion) and the Subordinate Resolution will be in full force and effect;

4873-7571-5870.2
(d) The District is not in breach of or in default under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States of America, or of any department, division, agency or instrumentality of either or any applicable court or administrative decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District is otherwise subject or bound which in any material way, directly or indirectly, affects the issuance of the Bonds or the validity thereof, the validity or adoption of the Subordinate Resolution or the execution and delivery of the Bonds, this Contract of Purchase, the Escrow Agreement, the Undertaking or the other instruments contemplated by any of such documents to which the District is a party, and the adoption of the Subordinate Resolution and compliance with the provisions of each will not, as of the date hereof and as of the Closing Date, conflict with or constitute a breach of or default in any material way under any existing constitutional provision, applicable law or administrative rule or regulation of the State of California, the United States, or of any department, division, agency or instrumentality of either or any applicable court or administrative judgment, decree or order, or any loan agreement, bond, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the District is a party or to which the District or any of the property or assets of the Electric System (as defined in the Subordinate Resolution) are otherwise subject or bound, and no event which would have a material and adverse effect upon the financial condition of the District has occurred and is continuing which constitutes or with the passage of time or the giving of notice, or both, would constitute a default or event of default by the District under any of the foregoing;

(e) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Subordinate Resolution, the Undertaking and this Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, this Contract of Purchase, the Escrow Agreement, the Undertaking, the Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained;

(f) The Bonds, when issued and delivered in accordance with the Subordinate Resolution and this Contract of Purchase and paid for by the Underwriters on the Closing Date as provided herein, will be validly issued and outstanding special obligations of the District enforceable against the District in accordance with their terms and entitled to all the benefits and security of the Subordinate Resolution; and, upon the issuance and delivery of the Bonds, the Subordinate Resolution will provide, for the benefit of the holders from time to time of the Bonds,
a legally valid and binding pledge of and lien on Net Subordinated Revenues pledged under the Subordinate Resolution, as provided in and contemplated by the Subordinate Resolution;

(g) The Preliminary Official Statement, as of its date and as of the date hereof, did not and does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(h) At the time of the District’s acceptance hereof and (unless the Official Statement is amended or supplemented pursuant to paragraph (i) of Section 2 hereof) at all times subsequent to the date of delivery thereof up to and including the Closing Date, the Official Statement will be true, correct, complete and final in all material respects and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(i) If, after the date of this Contract of Purchase and until 25 days after the end of the “underwriting period” (as defined in Rule 15c2-12), any event shall occur that might cause the Official Statement to contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the District hereby covenants and agrees, to the extent it has knowledge of such event, to notify the Underwriters (and for the purposes of this clause to provide the Underwriters with such information as they may from time to time reasonably request), and, if in the opinion of the Underwriters and their counsel such event requires the preparation and publication of a supplement or amendment to the Official Statement, at its expense to supplement or amend the Official Statement in a form and manner approved by the Underwriters and furnish to the Underwriters a reasonable number of copies of such supplement or amendment. For purposes of this Contract of Purchase, the District may assume that the end of the “underwriting period” has occurred on the Closing Date unless the District is otherwise notified by the Underwriters on or prior to the Closing Date. If the Underwriters notify the District that the Closing Date is not the end of the “underwriting period”, then the Underwriters shall further notify the District of the date that is the end of the “underwriting period” (as defined in Rule 15c2-12);

(j) If the Official Statement is supplemented or amended pursuant to paragraph (i) of Section 2 of this Contract of Purchase, at the time of each supplement or amendment thereto and (unless subsequently again supplemented or amended pursuant to such paragraph) at all times subsequent thereto during the “underwriting period”, the Official Statement as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which made, not misleading;

(k) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened (i) in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, (ii) affecting or seeking to prohibit, restrain or enjoin the issuance, sale or delivery of any of the Bonds, the application of the proceeds thereof in accordance
with the Subordinate Resolution, or the collection or application of Revenues (as defined in the Subordinate Resolution) or the collection or application of the Net Subordinated Revenues pledged to pay the principal of and interest on the Bonds under the Subordinate Resolution or in any way contesting or affecting the validity or enforceability of any of the Bonds, the Escrow Agreement, the Subordinate Resolution, the Undertaking, this Contract of Purchase or any action of the District contemplated by any of said documents, (iii) which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, (iv) contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the District or its authority with respect to the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery of the Undertaking, the Escrow Agreement, or this Contract of Purchase, or any action of the District contemplated by any of said documents, and (v) which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor;

(l) The District will furnish such information, execute such instruments and take such other action in cooperation with the Underwriters as the Underwriters may reasonably request (i) to qualify the Bonds for offer and sale under the “Blue Sky” or other securities laws and regulations of such states and other jurisdictions of the United States as the Senior Underwriter may designate, and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the Bonds; provided that in connection therewith the District shall not be required to execute or file a general or special consent to service of process or qualify to do business in any jurisdiction and will advise the Senior Underwriter promptly of receipt by the District of any written notification with respect to the suspension of the qualification of the Bonds for sale in any jurisdiction or written notification of the initiation or threat of any proceeding for that purpose;

(m) The audited financial statements of the District for the years ending December 31, 2021 and December 31, 2020 heretofore delivered to the Underwriters and incorporated by reference in the Preliminary Official Statement and the Official Statement as Appendix B fairly present the financial position of the District as of the dates indicated and such financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis;

(n) Between the date hereof and the Closing Date, the District will not, without the prior written consent of the Senior Underwriter, offer or issue any bonds, notes or other obligations for borrowed money, or incur any material liabilities, direct or contingent, nor will there be any adverse change of a material nature in the financial position, results of operations or condition, financial or otherwise, of the District, in either case other than in the ordinary course of its business or as disclosed in the Preliminary Official Statement or the Official Statement or as otherwise disclosed to the Senior Underwriter;

(o) The Bonds, the Escrow Agreement, the Subordinate Resolution and the Undertaking conform to the descriptions thereof contained in the Preliminary Official Statement and the Official Statement;
(p) The District has the legal authority to apply and will apply, or cause to be applied, the proceeds from the sale of the Bonds as provided in and subject to all of the terms and provisions of the Subordinate Resolution and as described in the Preliminary Official Statement and the Official Statement, including for payment of District expenses incurred in connection with the negotiation, marketing, issuance and delivery of the Bonds to the extent required by Section 7 (Expenses), and will not take or omit to take any action which action or omission will adversely affect the exclusion from gross income for federal income tax purposes of the interest on the Bonds;

(q) Any certificate signed by any official of the District, and delivered to the Underwriters, shall be deemed a representation and warranty by the District to the Underwriters as to the statements made therein; and

(r) Except as disclosed in the Preliminary Official Statement and the Official Statement, during the last five years the District has complied in all material respects with all previous undertakings required by Rule 15c2-12.

3. **Conditions to the Obligations of the Underwriters.** The obligations of the Underwriters to accept delivery of and pay for the Bonds on the Closing Date shall be subject to the performance by the District of its obligations to be performed hereunder at or prior to the Closing Date and to the fulfillment of the following conditions:

(a) The representations, warranties and covenants of the District contained herein shall be true, complete and correct on the date hereof and as of the Closing Date as if made on the Closing Date;

(b) At the Closing Date, the Subordinate Resolution shall have been duly adopted and shall be in full force and effect, and shall not have been repealed, amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters, and there shall have been taken in connection therewith, with the issuance of the Bonds and with the transactions contemplated thereby and by this Contract of Purchase, all such actions as, in the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel (“Bond Counsel”), shall be necessary and appropriate;

(c) At the Closing Date, the Official Statement shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriters;

(d) At or prior to the Closing Date, the Underwriters shall have received copies of the following documents, in each case satisfactory in form and substance to the Underwriters:

   (1) The Official Statement executed on behalf of the District by its Chief Executive Officer and General Manager, any Member of its Executive Committee, its Treasurer, its Secretary or its Chief Financial Officer (each an “Authorized Representative”);

   (2) The Undertaking executed on behalf of the District by an Authorized Representative;
(3) The Thirteenth Supplemental Resolution, with only such supplements or amendments thereto as may have been agreed to by the Underwriters and certified by an authorized officer of the District under its seal as having been duly adopted by the District and as being in full force and effect, and the Subordinate Resolution, certified by an authorized officer of the District as being in full force and effect, with such supplements and amendments thereto adopted after the date hereof as may have been agreed to by the Underwriters;

(4) An opinion or opinions relating to the Bonds, dated the Closing Date and addressed to the District, of Bond Counsel, in substantially the form included in the Official Statement as Appendix F, together with a letter or letters of such Bond Counsel, dated the Closing Date and addressed to the Underwriters, to the effect that the foregoing opinion or opinions addressed to the District may be relied upon by the Underwriters to the same extent as if such opinion or opinions were addressed to them;

(5) An opinion or opinions, dated the Closing Date and addressed to the Senior Underwriter, of Bond Counsel, in substantially the form attached hereto as Exhibit E;

(6) An opinion, dated the Closing Date and addressed to the Senior Underwriter, of General Counsel to the District, in substantially the form attached hereto as Exhibit C;

(7) An opinion, dated the Closing Date and addressed to the Underwriters, of Nixon Peabody LLP, as counsel for the Underwriters (“Underwriters’ Counsel”), to the effect that (i) the Bonds are exempt from the registration requirements of the Securities Act of 1933, as amended, and the Subordinate Resolution is exempt from qualification under the Trust Indenture Act of 1939, as amended; (ii) the Continuing Disclosure Agreement complies as to form in all material respects with the requirements of paragraph (b)(5) of the Rule applicable to the primary offering of the Bonds; and (iii) based upon the information made available to them in the course of their participation in the preparation of the Preliminary Official Statement and the Official Statement as counsel to the Underwriters and without having undertaken to determine independently, or assuming any responsibility for, the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement, they do not believe that (A) the Preliminary Official Statement, as of its date and as of the date of the Contract of Purchase, and (B) the Official Statement as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except for the information relating to Cede & Co., DTC or the operation of the book-entry system, the Appendices to the Official Statement, except Appendices C, and E, and summaries thereof and references thereto, and other financial, accounting and statistical data included therein, as to all of which no view need be expressed); and (iii) with respect to such matters as the Underwriters may reasonably require;

(8) A certificate, dated the Closing Date, signed by an Authorized Representative of the District in substantially the form attached hereto as Exhibit D (but in
lieu of or in conjunction with such certificate the Underwriters may, in its sole discretion, accept certificates or opinions of General Counsel to the District, or of other counsel acceptable to the Underwriters, that in the opinion of such counsel the issues raised in any pending or threatened litigation referred to in such certificate are without substance or that the contentions of all plaintiffs therein are without merit);

(9) The Escrow Agreement, executed by the District and the Escrow Agent;

(10) An acceptance of and agreement to the provisions of the Thirteenth Supplemental Resolution executed by the Trustee under the Subordinate Resolution in form and substance acceptable to the Underwriters;

(11) A tax certificate related to the Bonds in substance and form satisfactory to Bond Counsel;

(12) Ratings of the Bonds from S&P Global Ratings ("S&P") of not less than “[AA (stable outlook)]” and from Fitch Ratings, Inc. (“Fitch”) of not less than “[AA (stable outlook)]”;

(13) A report of [________], as verification agent (the “Verification Agent”) with respect to the sufficiency of amounts deposited pursuant to the Escrow Agreement and an opinion of Bond Counsel respecting the defeasance of the Refunded Bonds;

(14) An opinion of counsel to the Trustee/Escrow Agent, dated the Closing Date, addressed to the Underwriters, to the effect that (i) the Trustee/Escrow Agent is a national banking association duly organized and validly existing under the laws of the United States of America having full power and being qualified to enter into, accept and agree to the provisions of the Subordinate Resolution and to enter into and perform the Undertaking, (ii) the Undertaking and the Escrow Agreement have been duly authorized, executed and delivered by the Trustee/Escrow Agent and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the valid and binding obligation of the Trustee/Escrow Agent enforceable in accordance with its terms, subject to laws relating to bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting creditors’ rights generally, to the application of equitable principals and to the exercise of judicial discretion in appropriate cases, and to enter into and perform the Undertaking and the Escrow Agreement, (iii) all approvals, consents and orders of any governmental authority or agency having jurisdiction in this matter that would constitute a condition precedent to the performance by the Trustee/Escrow Agent of its duties and obligations under the Subordinate Resolution, the Escrow Agreement, and the Undertaking have been obtained and are in full force and effect, and (iv) the acceptance of the duties and obligations of the Trustee/Escrow Agent under the Subordinate Resolution, the Escrow Agreement, and the Undertaking and the consummation of the transactions on the part of the Trustee/Escrow Agent contemplated therein, and the compliance by the Trustee/Escrow Agent, as applicable, with the terms, conditions and provisions of such document do not contravene any provisions of applicable law or regulation or any order or decree, writ or injunction or the Articles of Association or Bylaws of the Trustee/Escrow
Agent, and, to the best knowledge of such counsel, will not require the consent under or result in a breach of or a default under, any resolution, agreement or other instrument to which the Trustee/Escrow Agent is a party or by which it may be bound;

(15) A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by DTC and the District; and

(16) Such additional legal opinions, certificates, instruments and other documents as the Underwriters may reasonably request to evidence the truth and accuracy and completeness, as of the date hereof and as of the Closing Date, of the District’s representations and warranties contained herein and of the statements and information contained in the Preliminary Official Statement or the Official Statement, and the due performance or satisfaction by the District at or prior to the Closing Date of all agreements then to be performed and all conditions then to be satisfied by the District in connection with the transactions contemplated hereby and by the Subordinate Resolution and the Preliminary Official Statement or the Official Statement.

If any of the conditions to the obligations of the Underwriters contained in this Section or elsewhere in this Contract of Purchase with respect to the Bonds shall not have been satisfied when and as required herein, all obligations of the Underwriters hereunder with respect to the Bonds may be terminated by the Underwriters at, or at any time prior to, the Closing Date by written notice to the District.

4. Offering. The obligations of the District to sell and to deliver the Bonds on the Closing Date to the Underwriters shall be subject to the following conditions:

(a) The entire $[PAR] aggregate principal amount of the Bonds shall be purchased, accepted and paid for by the Underwriters on the Closing Date; and

(b) The District shall receive an Issue Price Certificate of the Senior Underwriter substantially in the form attached hereto as Exhibit F with respect to the Bonds.

5. Issue Price of the Bonds.

(a) The Senior Underwriter, on behalf of the Underwriters, agrees to assist the District in establishing the issue price of the Bonds and shall execute and deliver to the District at Closing an “issue price” or similar certificate substantially in the form attached hereto as Exhibit F, together with the supporting pricing wires or equivalent communications, with modifications to such certificate as may be deemed appropriate or necessary, in the reasonable judgment of the Senior Underwriter, the District and Bond Counsel, to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

(b) [Except for the maturities set forth in Schedule A attached hereto,] the District will treat the first price at which 10% of each maturity of the Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test).
(c) [The Senior Underwriter confirms that the Underwriters have offered the Bonds to the public on or before the date of this Contract of Purchase at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in the final Official Statement. Schedule A sets forth, as of the date of this Contract of Purchase, the maturities, if any, of the Bonds for which the 10% test has not been satisfied and for which the District and the Senior Underwriter, on behalf of the Underwriters, agree that (i) the Senior Underwriter will retain all unsold Bonds of each maturity for which the 10% test has not been satisfied and not allocate any such Bonds to any other Underwriter and (ii) the restrictions set forth in the next sentence shall apply, which will allow the District to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Senior Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following.

(1) the close of the fifth (5th) business day after the sale date; or

(2) the date on which the Underwriters have sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Senior Underwriter shall promptly advise the District or the District’s municipal advisor when the Underwriters have sold 10% of that maturity of the Bonds to the public at [a price] that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

The District acknowledges that, in making the representation set forth in this subsection, the Senior Underwriter will rely on (i) the agreement of each Underwriter to comply with the hold-the-offering-price rule, as set forth in an agreement among underwriters and the related pricing wires, (ii) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, as set forth in a selling group agreement and the related pricing wires, and (iii) in the event that an Underwriter is a party to a retail distribution agreement that was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, as set forth in the retail distribution agreement and the related pricing wires. The District further acknowledges that each Underwriter shall be solely liable for its failure to comply with its agreement regarding the hold the offering price rule and that no Underwriter shall be liable for the failure of any other Underwriter, or of any dealer who is a member of a selling group, or of any broker-dealer that is a party to a retail distribution agreement to comply with its agreement regarding the hold-the-offering-price rule as applicable to the Bonds.]

(d) [The Senior Underwriter confirms that:

(1) any agreement among underwriters, any selling group agreement and each retail distribution agreement (to which the Senior Underwriter is a party) relating to the initial sale of the Bonds to the public, together with the related pricing
wires, contains or will contain language obligating each Underwriter, each dealer who is a member of the selling group, and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A)(ii) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (ii) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter and as set forth in the related pricing wires, (B) promptly notify the Representative of any sales of the Bonds that, to its knowledge, are made to a purchaser who is a related party to an underwriter participating in the initial sale of the Bonds to the public (each such term being used as defined below) and (C) acknowledge that, unless otherwise advised by the Underwriter, dealer or broker-dealer, the Representative shall assume that each order submitted by the Underwriter, dealer or broker-dealer is a sale to the public; and

(2) any agreement among underwriters relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each Underwriter that is a party to a retail distribution agreement to be employed in connection with the initial sale of the Bonds to the public to require each broker-dealer that is a party to such retail distribution agreement to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Senior Underwriter or the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Senior Underwriter or the Underwriter and as set forth in the related pricing wires.

(e) The Underwriters acknowledge that sales of any Bonds to any person that is a related party to an Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

(1) “public” means any person other than an underwriter or a related party,

(2) “underwriter” means (A) any person that agrees pursuant to a written contract with the District (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public),

(3) a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) more than 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of
another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other), and

(4) “sale date” means the date of execution of this Contract of Purchase by all parties.

6. Termination. The Underwriters shall have the right to terminate their obligations under this Contract of Purchase to purchase, accept delivery of and to pay for the Bonds, if,

(a) between the date hereof and the Closing Date, the market price or marketability, or the ability of the Underwriters to enforce contracts for the sale, at the initial offering prices set forth in the Official Statement, of the Bonds have been materially adversely affected, in the judgment of the Underwriters, (evidenced by a written notice to the District terminating the obligation of the Underwriters to accept delivery of and pay for the Bonds), by reason of any of the following:

(1) (x) any legislation which is (A) enacted by Congress, (B) favorably reported for passage to either House of the Congress of the United States by any Committee of such House to which such legislation has been referred for consideration, or (C) recommended to the Congress for passage by the President of the United States or the Treasury Department, but only, however, if the occurrence of any of the foregoing events is generally accepted by the municipal bond market as potentially affecting the federal tax status of the District, its property or income or the interest on its bonds or notes (including the Bonds), (y) any decision rendered by a court established under Article III of the Constitution of the United States or the Tax Court of the United States, or (z) a final order, ruling, regulation or official statement issued or made by or on behalf of the Treasury Department of the United States or the Internal Revenue Service with the purpose or effect, directly or indirectly, of imposing federal income taxation upon such interest as would be received by the holders of the Bonds, or upon such revenues or other income of the general character expected to be received by the District; provided, however, that the enactment of legislation which only diminishes the value of, as opposed to eliminating the exclusion from gross income for federal income tax purposes will not give the Underwriters the right to terminate their obligations hereunder;

(2) Legislation enacted (or resolution passed) by the Congress or a final order, ruling, regulation or official statement is issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the Bonds are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or are not exempt from qualification
under, or other requirements of, the Trust Indenture Act of 1939, as amended, or that the issuance, offering or sale of the Bonds or obligations of the general character of the Bonds, including any or all underlying arrangements, as contemplated hereby or by the Preliminary Official Statement or the Official Statement, otherwise is or would be in violation of the federal securities laws as amended and then in effect;

(3) the outbreak or escalation of hostilities or the declaration by the United States of a national emergency or war or the occurrence of any other local, national or international calamity, crisis or event relating to the effective operation of the government of or the financial community in the United States or an escalation thereof, including, without limitation, a downgrade of the sovereign debt rating of the United States by any major credit rating agency or payment default on United States Treasury obligations;

(4) the declaration of a general banking moratorium by federal, New York or California authorities, or the general suspension of trading on the New York Stock Exchange or any other national securities exchange, or any material disruption in commercial banking or securities settlement or clearing services;

(5) the imposition by the New York Stock Exchange or other national securities exchange, or any governmental authority, of any material restrictions not now in force with respect to the Bonds or obligations of the general character of the Bonds or securities generally, or the material increase of any such restrictions now in force, including those relating to the net capital requirements of, the Underwriters;

(6) the adoption of any amendment to the federal or California Constitution, decision by any federal or California court, or enactment by any federal or California legislative body materially adversely affecting (i) the District or the right of the District to receive or to pledge any of the Net Subordinated Revenues, or (ii) the validity or enforceability of this Contract of Purchase, the Bonds or the Subordinate Resolution;

(7) the adoption of any amendment to the California Constitution, decision by any California court, or enactment by any California legislative body adversely affecting the exemption of state or local income tax upon such interest as would be received by the holders of the Bonds, or

(8) (i) a downgrading or suspension of any rating (without regard to credit enhancement) by Moody’s, S&P, or Fitch of any debt securities issued by the District, or (ii) there shall have been any official statement as to a possible downgrading (such as being placed on “credit watch” or “negative outlook” or any similar qualification) of any rating by Moody’s, S&P or Fitch of any debt securities issued by the District, including the Bonds.
(b) an event occurs, or information becomes known, which, in the judgment of the Underwriters, makes untrue in any material respect any statement or information contained in the Official Statement, or has the effect that the Official Statement contains any untrue statement of material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

7. Expenses. (a) Except as set forth in paragraph (b) of this Section, the Underwriters shall be under no obligation to pay, and the District shall pay, or cause to be paid, all expenses incident to the performance of the District’s obligations hereunder including, but not limited to, the cost of word processing and reproducing, executing and delivering the Bonds to the Underwriters; the cost of preparation, printing (and/or word processing and reproducing), distribution and delivery of the Subordinate Resolution; the cost of printing and distributing copies of the Preliminary Official Statement and the Official Statement in sufficient quantities for distribution in connection with the sale of the Bonds (including resales in the secondary market); the fees and disbursements of Bond Counsel; the fees and disbursements of Public Financial Management, Inc. for its services as Municipal Advisor to the District; the fees and disbursements of any other engineers, accountants, and any other experts or consultants retained in connection with the issuance of the Bonds; the fees and disbursements of the Trustee/Escrow Agent and Verification Agent; fees charged by the rating agencies for rating the Bonds; any advertising expenses; filing fees; CUSIP charges; or fees and expenses of any credit enhancement; expenses incurred by the Underwriters on behalf of the District relating to food, transportation or lodging for District staff members attending the bond pricing are to be reimbursed by the District through proceeds of the Bonds or available funds of the District (the District’s obligations in regard to these expenses survive if delivery of the Bonds fails due to one of the conditions set forth in Section 3 hereof or this Contract of Purchase is terminated pursuant to Section 6 hereof) and any other expenses not specifically enumerated in paragraph (b) of this Section incurred in connection with the issuance of the Bonds.

(b) The District shall be under no obligation to pay, and the Underwriters shall pay (from the expense component of the underwriting discount), the cost of preparation of the Agreement Among Underwriters and the letter of instructions relating thereto and this Contract of Purchase; the cost of wiring funds for the payment of the purchase prices of the Bonds; the fees and expenses of DTC incurred with respect to depositing the Bonds therewith; expenses to qualify the Bonds for sale under any “Blue Sky” laws; fees to the California Debt and Investment Advisory Commission; and all other expenses incurred by the Underwriters in connection with its public offering and distribution of the Bonds not specifically enumerated in paragraph (a) of this Section, including the fees and disbursements of Underwriters’ Counsel. Notwithstanding that the fees to the California Debt and Investment Advisory Commission are solely the legal obligation of the Underwriters, the District agrees to reimburse the Underwriters for such fees.

8. Notices. Any notice or other communication to be given to the District under this Contract of Purchase may be given by delivering the same in writing to Sacramento Municipal Utility District, at 6201 S Street, Sacramento, California 95817-1899; and any notice or other communication to be given to the Underwriters under this Contract of Purchase may be given by delivering the same in writing to Morgan Stanley & Co. LLC, 555 California Street, 21st Floor, San Francisco, CA 94104 [Attention: John Sheldon, Managing Director].
9. **Parties in Interest.** This Contract of Purchase is made solely for the benefit of the District and the Underwriters (including successors or assigns of any Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof. The term “successors and assigns” as used in this Section shall not include any purchaser of the Bonds, as such purchaser, from any of the several Underwriters.

10. **Survival of Representations and Warranties.** The representations and warranties of the District, set forth in or made pursuant to this Contract of Purchase, shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the closing or termination of this Contract of Purchase and regardless of any investigations or statements as to the results thereof made by or on behalf of the Underwriters and regardless of delivery of and payment for the Bonds.

11. **Counterparts.** This Contract of Purchase may be executed in several counterparts, which together shall constitute one and the same instrument.

12. **California Law Governs; Venue.** The validity, interpretation and performance of this Contract of Purchase shall be governed by the laws of the State of California. Any action or proceeding to enforce or interpret this Contract of Purchase shall be brought, commenced or prosecuted in the County of Sacramento, California.

[remainder of page intentionally left blank]
13. **Entire Agreement.** This Contract of Purchase when accepted by you in writing as heretofore specified shall constitute the entire agreement between us.

14. **Effectiveness.** This Contract of Purchase shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by an authorized officer of the District and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,

MORGAN STANLEY & CO. LLC
BOFA SECURITIES, INC.,
BARCLAYS CAPITAL INC.
CITIGROUP GLOBAL MARKETS INC.
GOLDMAN SACHS & CO. LLC, and
J.P. MORGAN SECURITIES LLC

BY: MORGAN STANLEY & CO. LLC, as Senior Underwriter

[John Sheldon
Managing Director]

Accepted: [SALE DATE]

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: ____________________________
    Russell Mills
    Treasurer

[Signature page to Contract of Purchase]
Exhibit A

SACRAMENTO MUNICIPAL UTILITY DISTRICT

$[PAR] Subordinated Electric Revenue Refunding Bonds, 2022 Series C

<table>
<thead>
<tr>
<th>Maturity (August 15)</th>
<th>Principal Amount</th>
<th>Interest Rate</th>
<th>Yield</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>4873-7571-5870.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Re: Sacramento Municipal Utility District
$[PAR] Subordinated Electric Revenue Refunding Bonds, 2022 Series C

Ladies and Gentlemen:

This opinion is being delivered pursuant to Paragraph 3(d)(6) of the Contract of Purchase (the “Contract of Purchase”), dated [SALE DATE], between Morgan Stanley & Co. LLC, as Senior Managing Underwriter named therein (the “Senior Underwriter”), and the Sacramento Municipal Utility District (the “District”) relating to the above-captioned bonds (the “Bonds”).

As counsel to the District, I have reviewed (i) Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as amended and supplemented to date, including as amended and supplemented by Resolution No. [RESO NO.], adopted on [RESO DATE] (as so amended and supplemented, the “Subordinate Resolution”); (ii) the Continuing Disclosure Agreement, dated the date hereof (the “Undertaking”), between the District and U.S. Bank Trust Company, National Association, as trustee (in such capacity, the “Trustee”); (iii) the Official Statement of the District, dated [SALE DATE] (the “Official Statement”) (iv) the escrow agreement, dated the date hereof (the “Escrow Agreement”), between the District and U.S. Bank Trust Company, National Association, as escrow agent (in such capacity, the “Escrow Agent”), and (v) such other documents, opinions and matters to the extent I deemed necessary to provide the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. I have assumed the genuineness of all documents and signatures presented to me (whether as originals or as copies) and the due and legal execution and delivery by, and validity against, any parties other than the District. I have not undertaken to verify independently, and have assumed, the accuracy of the factual matters represented, warranted or certified in the documents referred to in the second paragraph hereof. I have further assumed compliance with all covenants and agreements contained in such documents.
I call attention to the fact that the rights and obligations under the Subordinate Resolution, the Escrow Agreement, the Undertaking, and the Contract of Purchase may be subject to bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, and to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. I express no opinion with respect to any indemnification, contribution, choice of law, choice of forum or waiver provisions contained therein.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, I am of the opinion that:

1. The District is a political subdivision of the State of California duly organized and validly existing under the Act, as amended, and has full legal right, power and authority to execute and deliver (or adopt, as the case may be), and to perform its obligations under, the Subordinate Resolution, the Escrow Agreement, the Undertaking and the Contract of Purchase.

2. The Contract of Purchase, the Escrow Agreement, and the Undertaking have been duly authorized, executed and delivered by the District, and, assuming due authorization, execution and delivery by each of the parties thereto other than the District, constitute the legal, valid and binding obligations of the District, enforceable against the District in accordance with their respective terms.

3. The District is not in breach of or default under any existing constitutional provision, applicable law or administrative regulation of the State of California or the United States or any applicable judgment or decree or any loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject which would have a material adverse effect on the financial condition or operations of the District, and no event has occurred and is continuing which with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which would have a material adverse effect on the financial condition or operations of the District; and the execution and delivery of the Bonds, the Escrow Agreement, the Undertaking and the Contract of Purchase and the adoption of the Subordinate Resolution, and compliance with any existing constitutional provision, law, administrative regulation, judgment, decree, loan agreement, indenture, bond, note, resolution, agreement or other instrument known to me after reasonable inquiry to which the District is a party or to which the District or any of its property or assets is otherwise subject will not, as of the date hereof, conflict with or constitute a breach of or default under any such instrument which would have a material adverse effect on the financial condition or operations of the District, nor will any such execution, delivery, adoption or compliance result in the creation or imposition of any lien, charge or other security interest or encumbrance of any nature whatsoever upon any of the property or assets of the District or under the terms of any such law, regulation or instrument, except as expressly provided by the Bonds and the Subordinate Resolution.

4. The statements contained in the Official Statement which purport to describe certain provisions of the Bonds, the Escrow Agreement, the Undertaking, and the Subordinate
Resolution present a fair and accurate summary of such provisions for the purpose of use in the Official Statement.

5. Except as described or referred to in the Preliminary Official Statement and the Official Statement, as of the date hereof, there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body, pending or, to the best of my knowledge, threatened against the District affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of the Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds or contesting or affecting as to the District the validity or enforceability of the Act, the Bonds, the Subordinate Resolution, the Escrow Agreement, the Contract of Purchase or the Undertaking, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution facilities, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase, the Escrow Agreement, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act or the authorization, execution, delivery or performance by the District of the Bonds, the Subordinate Resolution, the Escrow Agreement, the Undertaking, or the Contract of Purchase.

6. Based upon my review of the Preliminary Official Statement and the Official Statement as General Counsel to the District and without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Preliminary Official Statement and the Official Statement (except as specifically set forth in paragraph 4 hereof), I have no reason to believe that the statements contained in the Preliminary Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Preliminary Official Statement, and other financial and statistical data included therein, as to all of which I express no view) as of its date and as of the date of the Contract of Purchase contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading and the Official Statement (except for information relating Cede & Co., DTC or the operation of the book-entry system, the Appendices (except Appendix A) to the Official Statement, and other financial and statistical data included therein, as to all of which I express no view) (A) as of the date of the Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or (B) as of the date hereof contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.
For purposes of the opinions expressed herein, I have assumed that an agreement or other document is “material” to the District if it involves amounts in excess of $10,000,000 and that a matter would result in a “material adverse change” to the District if the financial consequences involved would exceed $10,000,000.

I understand that you are relying upon the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, with respect to the validity of the Bonds and the exclusion of interest on the Bonds from gross income for federal income tax purposes and the Bonds for purposes of State of California income taxation and, accordingly, render no opinion with respect thereto.

Very truly yours,
SACRAMENTO MUNICIPAL UTILITY DISTRICT

Exhibit D to the Contract of Purchase

CERTIFICATE

The Sacramento Municipal Utility District (the “District”), hereby certifies that:

(1) The representations and warranties of the District (excluding those representations and warranties contained in Section 2(e) and Section 2(k) of the hereinafter defined Contract of Purchase) contained in the Contract of Purchase, dated [SALE DATE], between the District and the Underwriters named therein (the “Contract of Purchase”) with respect to the sale by the District of $[PAR] aggregate principal amount of its Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “Bonds”), are true and correct on and as of the Closing Date as if made on the Closing Date.

(2) All approvals, consents, authorizations, licenses and permits, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the due performance by the District of its obligations in connection with the issuance of the Bonds under the Subordinate Resolution, the Escrow Agreement, the Undertaking, and the Contract of Purchase have been duly obtained or made and are in full force and effect, except for such approvals, consents and orders as may be required under the “Blue Sky” or other securities laws of any state in connection with the offering and sale of the Bonds; and, except as disclosed in the Preliminary Official Statement and the Official Statement, all authorizations, approvals, licenses, permits, consents and orders of any governmental authority, board, agency or commission having jurisdiction in the matters which are required for the due authorization of, which would constitute a condition precedent to, or the absence of which would materially adversely affect the due performance by the District of its respective obligations under, the Contract of Purchase, the Escrow Agreement, the Undertaking, the Bonds or the Subordinate Resolution, or which are necessary to permit the District to carry out the transactions contemplated by the Preliminary Official Statement and the Official Statement to acquire, construct, operate, maintain, improve and finance the Electric System have been duly obtained or, where required for future performance, are expected to be obtained.

(3) Except as disclosed in the Preliminary Official Statement and the Official Statement, no litigation, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, regulatory agency, public board or body, is pending or, to the best of knowledge of the officer of the District executing this Contract of Purchase after due investigation, threatened against the District, in any way affecting the corporate existence of the District or the titles of its officers to their respective offices, or affecting or seeking to prohibit, restrain or enjoin the sale, issuance or delivery of any of the Bonds or the collection of the Revenues (as defined in the Subordinate Resolution) or the Net Subordinated Revenues (as defined in the Subordinate Resolution) pledged or to be pledged to pay the principal of and interest on the Bonds, or in any way contesting or affecting as to the District the validity or enforceability of the
Act, the Bonds, the Subordinate Resolution, the Contract of Purchase, the Escrow Agreement, the Undertaking, or any action of the District contemplated by any of said documents, or contesting the tax exempt status of interest on the Bonds, or which may result in any material adverse change relating to the District, other than routine litigation of the type which normally accompanies its operation of its generation, transmission and distribution system, or contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto, or contesting the powers of the District or any authority for the issuance of the Bonds, the adoption of the Subordinate Resolution, or the execution and delivery by the District of the Contract of Purchase, or the Undertaking, nor, to the best of my knowledge, is there any basis for any such action, suit, proceeding, inquiry or investigation wherein an unfavorable decision, ruling or finding would materially adversely affect the validity or enforceability of the Act of the authorization, execution, delivery or performance by the District of the Bonds, the Subordinate Resolution, the Escrow Agreement, the Undertaking, or the Contract of Purchase, or any action of the District contemplated by any of said documents, or which would adversely affect the exclusion from gross income for federal income tax purposes of interest paid on the Bonds, nor to the knowledge of the officer of the District executing this Contract of Purchase is there any basis therefor.

(4) No event affecting the District has occurred since the date of the Official Statement which should be disclosed in the Official Statement so that the Official Statement will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and which has not been disclosed in a supplement or amendment to the Official Statement.

(5) The District has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the date hereof pursuant to the Contract of Purchase with respect to the issuance of the Bonds.

(6) All capitalized terms employed herein which are not otherwise defined shall have the same meanings as in the Contract of Purchase.

SACRAMENTO MUNICIPAL UTILITY DISTRICT

By: ________________________________
Name: ________________________________
Title: ________________________________

Dated: [CLOSING DATE]
Exhibit E to the Contract of Purchase
(Supplemental Opinion of Bond Counsel)

[CLOSING DATE]

Morgan Stanley & Co. LLC
555 California St., Fl. 21,
San Francisco, CA 94104

Sacramento Municipal Utility District
Subordinated Electric Revenue Refunding Bonds, 2022 Series C
(Supplemental Opinion)

Ladies and Gentlemen:

This letter is addressed to you, as Senior Underwriter, pursuant to Section 3(d)(5) of the Contract of Purchase, dated [SALE DATE] (the “Purchase Contract”), between you and the other underwriters named therein and the Sacramento Municipal Utility District (“SMUD”), providing for the purchase of $[PAR] principal amount of Sacramento Municipal Utility District Subordinated Electric Revenue Refunding Bonds, 2022 Series C (the “Bonds”). The Bonds are being issued pursuant to Resolution No. 85-11-1, adopted by the Board of Directors of the District on November 7, 1985, as amended and restated pursuant to Resolution No. 01-06-10, adopted by the Board of Directors of the District on June 21, 2001, as amended and supplemented to date, including as amended and supplemented by Resolution No. [RESO NO.], adopted on [RESO DATE] (as so supplemented and amended, the “Subordinate Resolution”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Subordinate Resolution or, if not defined in the Subordinate Resolution, in the Purchase Contract.

In connection with our role as Bond Counsel to SMUD, we have reviewed the Purchase Contract; the Subordinate Resolution; the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed by SMUD; certain portions of the posted preliminary official statement of SMUD, dated [POS DATE], with respect to the Bonds (the “Preliminary Official Statement”) and of the posted official statement of SMUD, dated [SALE DATE], with respect to the Bonds (the “Official Statement”); opinions of counsel to SMUD and the Trustee; certificates of SMUD, the Trustee and others; and such other documents, opinions and matters to the extent we deemed necessary to provide the opinions or conclusions set forth herein.

The opinions and conclusions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions or conclusions may be affected by actions taken or omitted or events occurring after the original delivery of the Bonds on the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the original delivery of the Bonds on the date hereof. We have assumed the genuineness of all documents and signatures provided to us.

E-1
and the due and legal execution and delivery thereof by, and validity against, any parties other than SMUD. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. We have further assumed compliance with all covenants and agreements contained in such documents. In addition, we call attention to the fact that the rights and obligations under the Bonds, the Subordinate Resolution, the Tax Certificate and the Purchase Contract and their enforceability may be subject to bankruptcy, insolvency, reorganization, receivership, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal utility districts in the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or having the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinions with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Subordinate Resolution or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions or conclusions:

1. The Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Subordinate Resolution is exempt from qualification pursuant to the Trust Indenture Act of 1939, as amended.

2. The Purchase Contract has been duly executed and delivered by, and is a valid and binding agreement of, SMUD.

3. The statements contained in the Official Statement under the captions “THE 2022 SUBORDINATED BONDS” (excluding information relating to book-entry or The Depository Trust Company), “SECURITY FOR THE SUBORDINATED BONDS” and “TAX MATTERS” and in APPENDIX D – “SUMMARY OF CERTAIN PROVISIONS OF THE SUBORDINATE RESOLUTION” and APPENDIX E – “SUMMARY OF CERTAIN PROVISIONS OF THE SENIOR BOND RESOLUTION” and APPENDIX F – “PROPOSED FORM OF LEGAL OPINION FOR 2022 SUBORDINATED BONDS,” excluding any material that may be treated as included under such captions by cross-reference or reference to other documents or sources, insofar as such statements expressly summarize certain provisions of the Subordinate Resolution or set out the form and content of our final legal opinion as Bond Counsel to SMUD concerning the validity of the Bonds and certain other matters, dated the date hereof and addressed to SMUD, are accurate in all material respects.

4. We are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of any of the statements contained in the Preliminary Official Statement or (except as explicitly stated in paragraph 3 above) in the Official Statement and make no representation that we have independently verified the accuracy, completeness or fairness of any such statements. In our capacity as Bond Counsel to SMUD in connection with issuance of
the Bonds, we participated in conferences with your representatives, your counsel, representatives of SMUD, its counsel, accountants, and others, during which the contents of the Preliminary Official Statement or the Official Statement and related matters were discussed. Based on our participation in the above-mentioned conferences (which, with respect to the Preliminary Official Statement, did not extend beyond the date of the Purchase Contract, and with respect to the Official Statement, did not extend beyond its date), and in reliance thereon, on oral and written statements and representations of SMUD and others and on the records, documents, certificates, opinions and matters herein mentioned, subject to the limitations on our role as Bond Counsel to SMUD, we advise you as a matter of fact and not opinion that (a) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Preliminary Official Statement which caused us to believe as of the date of the Purchase Contract, based on the documents, drafts and facts in existence and reviewed as of that date, that the Preliminary Official Statement contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (except any information marked as preliminary or subject to change, any information permitted to be omitted by Securities and Exchange Commission Rule 15c2-12 or otherwise left blank and any other differences with the information in the Official Statement), and (b) no facts had come to the attention of the attorneys in our firm rendering legal services with respect to the Official Statement which caused us to believe as of the date of the Official Statement and as of the date hereof that the Official Statement contained or contains any untrue statement of a material fact or omitted or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, we expressly exclude from the scope of this paragraph and express no view or opinion, with respect to both the Preliminary Official Statement and the Official Statement, about any CUSIP numbers, financial, accounting, statistical or economic, engineering or demographic data or forecasts, numbers, charts, tables, graphs, estimates, projections, assumptions or expressions of opinion, any statements about compliance with prior continuing disclosure undertakings, any management discussion and analysis, any information about Cede & Co., The Depository Trust Company or book-entry, ratings, rating agencies, financial advisors, swap advisors, underwriters, underwriting and the information contained in Appendices B and C included or referred to therein or omitted therefrom. No responsibility is undertaken or view expressed with respect to any other disclosure document, materials or activity, or as to any information from another document or source referred to by or incorporated by reference in the Preliminary Official Statement or the Official Statement.

This letter is furnished by us as Bond Counsel to SMUD. No attorney-client relationship has existed or exists between our firm and you in connection with the Bonds or by virtue of this letter. We disclaim any obligation to update this letter. This letter is delivered to you as Senior Underwriter of the Bonds, is solely for your benefit as such Senior Underwriter in connection with the original issuance of the Bonds on the date hereof; and is not to be used, circulated, quoted or otherwise referred to or relied upon for any other purpose or by any other person. This letter is not intended to, and may not, be relied upon by owners of Bonds or by any other party to whom it is not specifically addressed.

Very truly yours,

4873-7571-5870.2
Exhibit F to the Contract of Purchase

(Form of Issue Price Certificate Of The Senior Underwriter Regarding Offering Prices)

SACRAMENTO MUNICIPAL UTILITY DISTRICT

$[PAR] Subordinated Electric Revenue Refunding Bonds, 2022 Series C

The undersigned, on behalf of Morgan Stanley & Co. LLC, as representative (the “Representative”) of itself, BofA Securities, Inc., Barclays Capital Inc., Citigroup Global Markets Inc., Goldman Sachs & Co. LLC, and J.P. Morgan Securities LLC (together, the “Underwriting Group”), hereby certifies, on its own behalf and on behalf of the other members of the Underwriting Group on the basis of representations and warranties set forth in the agreement among underwriters, as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds).

1. **Sale of the [General Rule Maturities][Bonds].** As of the date of this Certificate, for each Maturity of the [General Rule Maturities][Bonds], the first price at which at least 10% of such Maturity was sold to the Public is the respective price listed in Schedule A.

2. **[Initial Offering Price of the Hold-the-Offering-Price-Maturities.**
   
   (a) The Underwriting Group offered the Hold-the-Offering-Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.
   
   (b) As set forth in the Bond Purchase Agreement for the Bonds, the Representative has agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, it would neither offer nor sell any of the unsold Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) unsold Bonds of the Hold-the-Offering-Price Maturities shall be retained by the Representative and not allocated to any of the other Underwriters. Pursuant to such agreement, the Representative has not offered or sold any unsold Bonds of any Maturity of the Hold-the-Offering-Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.

3. **Defined Terms.**
   
   (a) **[General Rule Maturities]** means those Maturities of the Bonds listed in Schedule A hereto as the “General Rule Maturities.”
   
   (b) **[Hold-the-Offering-Price Maturities]** means those Maturities of the Bonds listed in Schedule A hereto as the “Hold-the-Offering-Price Maturities.”
   
   (c) **[Holding Period]** means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day
after the Sale Date, or (ii) the date on which the Underwriters have sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.]

(d) **Issuer** means Sacramento Municipal Utility District.

(e) **Maturity** means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) **Public** means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a Related Party (as such terms are defined below) to an Underwriter.

(g) A purchaser of any of the Bonds is a **Related Party** to any Underwriter if the Underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other).

(h) **Sale Date** means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [SALE DATE].

(i) **Underwriter** means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The representations set forth in this certificate are limited to factual matters only, and as it relates to the actions of the other Underwriters, such representations are made to the best of the Representative’s knowledge based on the Representative’s records. Nothing in this certificate represents the Representative’s interpretation of any laws, including specifically Sections 103 and 148 of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations thereunder. The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the Issuer, in connection with rendering its opinion that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that it may give to the Issuer from time to time relating to the Bonds.
Dated: [CLOSING DATE]

Morgan Stanley & Co. LLC,
as representative of the Underwriting Group

By: ________________________________
Name: ______________________________
Schedule A

Sale Prices

S[PAR] Subordinated Electric Revenue Refunding Bonds, 2022 Series C

<table>
<thead>
<tr>
<th>Maturity (August 15)</th>
<th>Principal Amount</th>
<th>Interest Rate</th>
<th>Yield Price</th>
<th>Hold-the-Price Maturities</th>
<th>General Rule Maturities</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-4</td>
<td>4873-7571-5870.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TO
1. Lisa Limcaco
2. Jennifer Davidson
3. Lora Anguay
4. Scott Martin
5. 

TO
6. 
7. 
8. 
9. Legal
10. CEO & General Manager

Consent Calendar | X | Yes | No | If no, schedule a dry run presentation. | Budgeted | X | Yes | No | If no, explain in Cost/Budgeted section.
FROM (IPR)
Kathy Ketchum
DEPARTMENT
Accounting
MAIL STOP
B352
EXT.
5661
DATE SENT
04/29/2022

Requested Action: Designate SMUD’s Chief Financial Officer, Controller, Assistant Controller(s), and Principal Financial Accountant as “Authorized Agents” to engage with Federal Emergency Management Agency (FEMA) and the California Governor’s Office of Emergency Services (Cal OES) for the purpose of obtaining federal financial assistance grants for the next three years.

Summary: For grant funds which are available under the laws of the State of California and to file with the California Governor’s Office of Emergency Services for the purpose of obtaining certain federal financial assistance under Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.

To apply for grant funds, it is required every three years for the governing body of public entities to designate “Authorized Agent(s).” The “Authorized Agent(s)” are individuals that are authorized by the Governing Body to engage with FEMA and Cal OES on all matters regarding grants for which they have applied. The last designation was filed June 2019. SMUD’s current Authorized Agent(s) are designated as 1) Chief Financial Officer, 2) Controller, 3) Assistant Controller(s) and 4) Supervisor Accounts Receivable Other & Grants. This action will update the title of Supervisor Accounts Receivable Other & Grants to Principal Financial Accountant as an “Authorized Agent” and create a new authorization to May 18, 2025.

Board Policy: GP-3, Board Job Description

Benefits: Facilitate the process of SMUD applying to FEMA and Cal OES grants. In the past several years, SMUD has offset substantial damage costs with recovery funding from grants provided by FEMA and Cal OES.

Cost/Budgeted: Costs contained in internal labor budget.

Alternatives: N/A

Affected Parties: Executive Office, Accounting, Legal

Coordination: Executive Office, Accounting, Legal

Presenter: Kathy Ketchum, Manager, Accounting & Assistant Controller

Additional Links:

SUBJECT Designate SMUD’s “Authorized Agents” for FEMA and Cal OES

ITEM NO. (FOR LEGAL USE ONLY)

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
### BOARD AGENDA ITEM

#### STAFFING SUMMARY SHEET

**Committee Meeting & Date**
Finance & Audit  
May 17, 2022

**Board Meeting Date**
N/A

<table>
<thead>
<tr>
<th>TO (IPR)</th>
<th>TO</th>
<th>Consent Calendar</th>
<th>Yes</th>
<th>No</th>
<th>If no, schedule a dry run presentation.</th>
<th>Budgeted</th>
<th>Yes</th>
<th>No</th>
<th>If no, explain in Cost/Budgeted section.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casey Fallon</td>
<td>CEO &amp; General Manager</td>
<td>1. Jennifer Davidson</td>
<td>6.</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Lora Anguay</td>
<td>7.</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Scott Martin</td>
<td>8.</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.</td>
<td>9. Legal</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.</td>
<td>10. CEO &amp; General Manager</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FROM (IPR)</th>
<th>DEPARTMENT</th>
<th>MAIL STOP</th>
<th>EXT.</th>
<th>DATE SENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Casey Fallon</td>
<td>Procurement Operations</td>
<td>EA402</td>
<td>4984</td>
<td>5/6/22</td>
<td></td>
</tr>
</tbody>
</table>

**Requested Action:** Quarterly Procurement Report – 1st Quarter 2022.

**Summary:** In August 2003, the Board of Directors approved the SMUD Procurement Policy which included a commitment for staff to report on the SMUD Procurement Activities on a quarterly basis.

**Board Policy:**

*Number & Title*
This report is provided to demonstrate compliance with SMUD Policy BL-8 and the following Policy Elements:

- Competition
- Direct Procurement
- Sole Source Procurement
- Inclusiveness
- Environmental Procurement
- Responsible Bidder
- Best Value Procurement
- Strategic Alliances
- Protest Policy

**Benefits:** Ensures compliance with Public Contracting and Best Value procurement principles.

**Cost/Budgeted:** N/A

**Alternatives:** Not to provide a Quarterly Procurement Report.

**Affected Parties:** SMUD

**Coordination:** Procurement Operations

**Presenter:** Casey Fallon

**Additional Links:**

**SUBJECT**  
SMUD 1st Quarter 2022 Procurement Report

**ITEM NO. (FOR LEGAL USE ONLY)**

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
**NARRATIVE:**

**Requested Action:** Provide SMUD’s financial results for the year-to-date period in 2022.

**Summary:** Staff will present SMUD’s financial results for the year-to-date period in 2022 to the Board of Directors.

**Board Policy:** GP-3, Board Job Description

**(Number & Title)**

**Benefits:** Provides Board members with information regarding SMUD’s financial condition.

**Cost/Budgeted:** N/A

**Alternatives:** N/A

**Affected Parties:** Accounting

**Coordination:** Accounting

**Presenter:** Lisa Limcaco

---

**SUBJECT**

SMUD's 2022 Year-to-Date Financial Results
TO: Distribution
FROM: Kathy Ketchum / Lisa Limcaco

SUBJECT: MARCH 2022 FINANCIAL RESULTS AND OPERATIONS DATA

We are attaching the financial and operating reports for the three months of 2022. They include sales and generation statistics and other selected data.

The change in net position is an increase of $1.1 million compared to a budgeted decrease of $29.5 million, resulting in a favorable variance of $30.6 million.

We prepared these statements on the accrual basis of accounting, and they conform to generally accepted accounting principles. The bases for the budget amounts are:

1) Budgeted electric revenues are based on the Forecast of Revenues by the Pricing Department, adjusted for unbilled revenues; and

2) Budgeted operating expenses reflect the 2022 Budget approved by the Board of Directors on December 9, 2021.

Change in Net Position Year To Date
SACRAMENTO MUNICIPAL UTILITY DISTRICT
EXECUTIVE SUMMARY
For the Three Months Ended March 31, 2022

Net Position
- The change in net position is an increase of $1.1 million compared to a budgeted decrease of $29.5 million, resulting in a favorable variance of $30.6 million.

Revenues
- Revenues from sales to customers were $305.8 million, which was $7.1 million higher than planned.
  - The increase was primarily due to higher customer usage of $12.9 million and lower provision for uncollectible accounts of $2.7 million, offset by a shift in customer load shape compared to plan of $8.2 million.
- Revenues under the California Global Warming Solutions Act (Assembly Bill [AB] - 32) were $5.8 million. This is due to carbon allowances sold through the state sanctioned quarterly auctions.
- Low Carbon Fuel Standard (LCFS) revenues were $1.0 million, which was $2.5 million lower than planned due to a decrease in price per credit and the timing of credit sales.
- Non-cash revenues transferred to the rate stabilization fund were $6.8 million, of which $5.8 million was for AB-32 and $1.0 million was for LCFS. Funds are deferred until SMUD has qualified program expenses (projects that reduce carbon emissions or electric vehicle programs) to recognize revenue.
- Non-cash revenues transferred from the rate stabilization fund were $2.2 million, of which $2.0 million was for revenues recognized from LCFS electric vehicle programs expenses, and $0.1 million was from AB-32 program expenses.

Commodities, Purchased Power and Production
- Overall, load was higher than planned. Both hydro and thermal generation were lower than planned due to precipitation levels and outages, respectively. This resulted in lower fuel usage, decreased net price per MMBTU (due to fuel sales), and additional purchased power expense.
  - SMUD’s generation was lower by 347 GWh (21.1 percent); JPA and other generation was lower by 226 GWh (16.4 percent); Hydro generation was lower by 121 GWh (45.7 percent).
  - Purchased power expense of $90.3 million, less surplus power sales of $17.9 million, was $72.4 million, which was $28.3 million higher than planned. Purchased power expense increased because of higher quantities purchased of $20.5 million and higher prices of $7.8 million.
  - Production operations cost of $94.0 million, less surplus gas sales of $45.2 million, was $48.8 million, which was $19.3 million lower than planned.
    - Fuel costs of $67.6 million, less surplus gas sales of $45.2 million, was $22.4 million, which was $17.9 million lower than planned. This is primarily due to lower fuel prices of $15.8 million and lower fuel usage of $6.1 million, offset by higher natural gas hedging activities of $4.0 million. The lower price variance is due to surplus gas sales and higher sales price per Renewable Identification Number (RIN), which resulted in sales of $3.7 million higher than planned.
  - The “power margin”, or sales to customers less cost of purchased power, production operations costs and gas hedges included in investment expense was $188.6 million, which was $2.1 million higher than planned. Power margin as a percentage of sales to customers was 61.7 percent, which was 0.8 percent lower than planned.

Other Operating Expenses
- All other operating expenses were $179.6 million, which was $28.4 million lower than planned.
  - Customer accounts expenses were $2.4 million lower than planned primarily due to lower labor in Revenue Assurance and Contact Center Operations with moving the collection process to reset in mid-February.
  - Customer service and information expenses were $4.6 million lower than planned primarily due to lower transportation electrification expenses due to the delay in the Request for Proposal (RFP) for the contractor for the eFuel Program, lower load flexibility planning and support outside services, and lower Greenergy Recs and Carbon Offsets.
  - Administrative and General expenses were $2.0 million lower than planned primarily due to lower enterprise strategy costs and lower employee pension and benefit medical retiree costs.
- Public good expenses were $4.0 million lower than planned primarily due to less participation in energy efficiency programs and lower expenditures for research and development (R&D) programs due to delays in R&D pilots and programs.
- Transmission and distribution maintenance expenses were $6.2 million higher than planned. This is primarily due to higher routine tree trimming expenses as crews took advantage of dry weather, higher service reconnect and repair expenses caused by completing 52% more work than planned for year-to-date, and higher station equipment preventative maintenance primarily due to unplanned bushing replacements at multiple substations and onboarding/training of 13 new apprentices.
- Negative non-cash amortization of pension and other post-employment benefits (OPEB) was $22.8 million lower than planned, which resulted in a positive impact to net position. This is due to Governmental Accounting Standards Board (GASB) 68 Pension and GASB 75 OPEB negative amortizations.

Non-operating Revenues and Expenses
Other revenue, net, was $4.8 million higher than planned primarily due to higher investment revenue of $4.0 million due to natural gas hedging activities and $1.2 million higher contributions in aid of construction due to differences between accounting treatment of offsets and amounts recorded for budget purposes.
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
#### For the Month Ended March 31, 2022

**Operating Revenues**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales to customers</td>
<td>$106,933</td>
<td>$98,052</td>
<td>$8,881</td>
<td>9.1%</td>
</tr>
<tr>
<td>Sales of surplus power</td>
<td>6,135</td>
<td>10,884</td>
<td>(4,749)</td>
<td>(43.6%)</td>
</tr>
<tr>
<td>Sales of surplus gas</td>
<td>18,940</td>
<td></td>
<td>18,940</td>
<td>*</td>
</tr>
<tr>
<td>LCFS revenue</td>
<td>758</td>
<td>2,256</td>
<td>(1,498)</td>
<td>(66.4%)</td>
</tr>
<tr>
<td>Other electric revenue</td>
<td>3,366</td>
<td>3,126</td>
<td>240</td>
<td>7.7%</td>
</tr>
<tr>
<td>Revenue to rate stabilization fund</td>
<td>(758)</td>
<td>(758)</td>
<td>(758)</td>
<td>*</td>
</tr>
<tr>
<td>Revenue from rate stabilization fund</td>
<td>482</td>
<td></td>
<td>482</td>
<td>*</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td>135,856</td>
<td>114,318</td>
<td>21,538</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

**Operating Expenses**

**Operations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased power</td>
<td>29,954</td>
<td>33,805</td>
<td>(3,851)</td>
<td>(11.4%)</td>
</tr>
<tr>
<td>Production</td>
<td>29,152</td>
<td>17,744</td>
<td>11,408</td>
<td>64.3%</td>
</tr>
<tr>
<td>Transmission and distribution</td>
<td>7,072</td>
<td>6,953</td>
<td>119</td>
<td>1.7%</td>
</tr>
<tr>
<td>Customer accounts</td>
<td>4,627</td>
<td>4,933</td>
<td>(306)</td>
<td>(6.2%)</td>
</tr>
<tr>
<td>Customer service and information</td>
<td>5,022</td>
<td>7,401</td>
<td>(2,379)</td>
<td>(32.1%)</td>
</tr>
<tr>
<td>Administrative and general</td>
<td>13,461</td>
<td>15,024</td>
<td>(1,563)</td>
<td>(10.4%)</td>
</tr>
<tr>
<td>Public good</td>
<td>3,447</td>
<td>5,249</td>
<td>(1,802)</td>
<td>(34.3%)</td>
</tr>
<tr>
<td><strong>Total operations</strong></td>
<td>92,735</td>
<td>91,109</td>
<td>1,626</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

**Maintenance**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>2,542</td>
<td>3,891</td>
<td>(1,349)</td>
<td>(34.7%)</td>
</tr>
<tr>
<td>Transmission and distribution</td>
<td>12,110</td>
<td>9,475</td>
<td>2,635</td>
<td>27.8%</td>
</tr>
<tr>
<td><strong>Total maintenance</strong></td>
<td>14,652</td>
<td>13,366</td>
<td>1,286</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

**Depreciation and amortization**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>18,462</td>
<td>18,315</td>
<td>147</td>
<td>0.8%</td>
</tr>
<tr>
<td>Amortization of pension and OPEB</td>
<td>(6,515)</td>
<td>1,087</td>
<td>(7,602)</td>
<td>(699.4%)</td>
</tr>
<tr>
<td>Amortization of regulatory asset</td>
<td>2,786</td>
<td>2,881</td>
<td>(95)</td>
<td>(3.3%)</td>
</tr>
<tr>
<td><strong>Total depreciation and amortization</strong></td>
<td>14,733</td>
<td>22,283</td>
<td>(7,550)</td>
<td>(33.9%)</td>
</tr>
</tbody>
</table>

**Total operating expenses**

<table>
<thead>
<tr>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>122,120</td>
<td>126,758</td>
<td>(4,638)</td>
<td>(3.7%)</td>
</tr>
</tbody>
</table>

**Operating Income (Loss)**

<table>
<thead>
<tr>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,736</td>
<td>(12,440)</td>
<td>26,176</td>
<td>210.4%</td>
</tr>
</tbody>
</table>

**Non-Operating Revenues and Expenses**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income</td>
<td>337</td>
<td>336</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Investment revenue (expense)</td>
<td>(447)</td>
<td>(173)</td>
<td>(274)</td>
<td>(158.4%)</td>
</tr>
<tr>
<td>Other income (expense) - net</td>
<td>944</td>
<td>636</td>
<td>308</td>
<td>48.4%</td>
</tr>
<tr>
<td>Unrealized holding gains (losses)</td>
<td>(225)</td>
<td></td>
<td>(225)</td>
<td>*</td>
</tr>
<tr>
<td>Revenue - CIAC</td>
<td>1,547</td>
<td>1,162</td>
<td>385</td>
<td>33.1%</td>
</tr>
<tr>
<td><strong>Total other revenues</strong></td>
<td>2,156</td>
<td>1,961</td>
<td>195</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

**Interest Charges**

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest on long-term debt</td>
<td>8,584</td>
<td>8,642</td>
<td>(58)</td>
<td>(0.7%)</td>
</tr>
<tr>
<td>Interest on commercial paper</td>
<td>203</td>
<td>169</td>
<td>34</td>
<td>20.1%</td>
</tr>
<tr>
<td><strong>Total interest charges</strong></td>
<td>8,787</td>
<td>8,811</td>
<td>(24)</td>
<td>(0.3%)</td>
</tr>
</tbody>
</table>

**Change in Net Position**

<table>
<thead>
<tr>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7,105</td>
<td>(19,290)</td>
<td>$26,395</td>
<td>136.8%</td>
</tr>
</tbody>
</table>

* Equals 1000% or greater.
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
#### For the Three Months Ended March 31, 2022

(Thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Budget</th>
<th>Over (Under)</th>
<th>Percent of Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales to customers</td>
<td>$305,774</td>
<td>$298,691</td>
<td>$7,083</td>
<td>2.4%</td>
</tr>
<tr>
<td>Sales of surplus power</td>
<td>17,862</td>
<td>46,264</td>
<td>(28,402)</td>
<td>(61.4%)</td>
</tr>
<tr>
<td>Sales of surplus gas</td>
<td>45,205</td>
<td>-</td>
<td>45,205</td>
<td>*</td>
</tr>
<tr>
<td>AB32 revenue</td>
<td>5,830</td>
<td>-</td>
<td>5,830</td>
<td>*</td>
</tr>
<tr>
<td>LCFS revenue</td>
<td>960</td>
<td>3,484</td>
<td>(2,524)</td>
<td>(72.4%)</td>
</tr>
<tr>
<td>Other electric revenue</td>
<td>9,139</td>
<td>8,931</td>
<td>208</td>
<td>2.3</td>
</tr>
<tr>
<td>Revenue to rate stabilization fund</td>
<td>(6,790)</td>
<td>-</td>
<td>(6,790)</td>
<td>*</td>
</tr>
<tr>
<td>Revenue from rate stabilization fund</td>
<td>2,175</td>
<td>-</td>
<td>2,175</td>
<td>*</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td>380,155</td>
<td>357,370</td>
<td>22,785</td>
<td>6.4</td>
</tr>
</tbody>
</table>

|                      |            |            |              |                               |
| **OPERATING EXPENSES** |            |            |              |                               |
| Purchased power      | 90,263     | 90,344     | (81)         | (0.1%)                        |
| Production           | 94,029     | 68,154     | 25,875       | 38.0%                         |
| Transmission and distribution | 20,431   | 20,748     | (317)        | (1.5%)                        |
| Customer accounts    | 12,295     | 14,721     | (2,426)      | (16.5%)                       |
| Customer service and information | 15,112 | 19,731     | (4,619)      | (23.4%)                       |
| Administrative and general | 39,249   | 41,262     | (2,013)      | (4.9%)                        |
| Public good          | 9,044      | 13,033     | (3,989)      | (30.6%)                       |
| **Total operations** | 280,423    | 267,993    | 12,430       | 4.6                           |

|                      |            |            |              |                               |
| Maintenance          |            |            |              |                               |
| Production           | 8,106      | 7,811      | 295          | 3.8                           |
| Transmission and distribution | 30,295   | 24,062     | 6,231        | 25.8%                         |
| **Total maintenance** | 38,401    | 31,893     | 6,508        | 20.4%                         |

|                      |            |            |              |                               |
| Depreciation and amortization |        |            |              |                               |
| Depreciation         | 55,373     | 54,706     | 667          | 1.2                           |
| Amortization of pension and OPEB | (19,546) | 3,260      | (22,806)     | (699.6%)                      |
| Amortization of regulatory asset | 9,239     | 8,642      | 597          | 6.9                           |
| **Total depreciation and amortization** | 45,066   | 66,608     | 21,542       | (32.3%)                       |
| **Total operating expenses** | 363,890   | 366,494    | (2,604)      | (0.7%)                        |

### OPERATING INCOME (LOSS)

16,265

### NON-OPERATING REVENUES AND EXPENSES

|                      |            |            |              |                               |
| Other revenues/(expenses) |        |            |              |                               |
| Interest income       | 784        | 986        | (202)        | (20.5%)                       |
| Investment revenue (expense) | 3,513    | (518)      | 4,031        | 778.2                         |
| Other income (expense) - net | 2,466     | 2,097      | 369          | 17.6                          |
| Unrealized holding gains (losses) | (513) | -          | (513)        | *                             |
| Revenue - CIAC        | 4,627      | 3,481      | 1,146        | 32.9                          |
| **Total other revenues** | 10,877    | 6,046      | 4,831        | 79.9                          |

### Interest charges

|                      |            |            |              |                               |
| Interest on long-term debt | 25,733   | 25,922     | (189)        | (0.7%)                        |
| Interest on commercial paper | 332      | 508        | (176)        | (34.6%)                       |
| **Total interest charges** | 26,065    | 26,430     | (365)        | (1.4%)                        |

### CHANGE IN NET POSITION

$1,077

* Equals 1000% or greater.
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### SOURCES AND USES OF ENERGY - COMPARED TO BUDGET
#### For the Period Ended March 31, 2022

<table>
<thead>
<tr>
<th>Sources of Energy (GWh)</th>
<th>Month</th>
<th>Increase (Decrease)</th>
<th>Year to Date</th>
<th>Increase (Decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Budget</td>
<td>Percentage</td>
<td>Actual</td>
</tr>
<tr>
<td>Net Generated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydro</td>
<td>104</td>
<td>81</td>
<td>28.4 %</td>
<td>144</td>
</tr>
<tr>
<td>Carson Power Plant</td>
<td>17</td>
<td>27</td>
<td>(37.0)</td>
<td>26</td>
</tr>
<tr>
<td>Procter &amp; Gamble Power Plant</td>
<td>39</td>
<td>63</td>
<td>(38.1)</td>
<td>130</td>
</tr>
<tr>
<td>Campbell Power Plant</td>
<td>85</td>
<td>37</td>
<td>129.7</td>
<td>142</td>
</tr>
<tr>
<td>Cosumnes Power Plant</td>
<td>107</td>
<td>119</td>
<td>(10.1)</td>
<td>781</td>
</tr>
<tr>
<td>Other</td>
<td>38</td>
<td>32</td>
<td>18.8</td>
<td>74</td>
</tr>
<tr>
<td><strong>Total net generation</strong></td>
<td>390</td>
<td>359</td>
<td>8.6</td>
<td>1,297</td>
</tr>
<tr>
<td>Purchased Power less transmission losses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CalEnergy</td>
<td>21</td>
<td>19</td>
<td>10.5</td>
<td>55</td>
</tr>
<tr>
<td>Calpine Sutter</td>
<td>58</td>
<td>87</td>
<td>(33.3)</td>
<td>335</td>
</tr>
<tr>
<td>Drew Solar</td>
<td>-</td>
<td>27</td>
<td>(100.0)</td>
<td>-</td>
</tr>
<tr>
<td>Feed in Tariff</td>
<td>18</td>
<td>18</td>
<td>0.0</td>
<td>42</td>
</tr>
<tr>
<td>Grady Wind</td>
<td>73</td>
<td>52</td>
<td>40.4</td>
<td>222</td>
</tr>
<tr>
<td>Rancho Seco PV II</td>
<td>14</td>
<td>29</td>
<td>(51.7)</td>
<td>37</td>
</tr>
<tr>
<td>WAPA</td>
<td>15</td>
<td>36</td>
<td>(58.3)</td>
<td>24</td>
</tr>
<tr>
<td>WSPP and other</td>
<td>346</td>
<td>283</td>
<td>22.3</td>
<td>841</td>
</tr>
<tr>
<td>Other long term power</td>
<td>44</td>
<td>53</td>
<td>(17.0)</td>
<td>122</td>
</tr>
<tr>
<td><strong>Total net purchases</strong></td>
<td>589</td>
<td>604</td>
<td>(2.5)</td>
<td>1,678</td>
</tr>
<tr>
<td><strong>Total sources of energy</strong></td>
<td>979</td>
<td>963</td>
<td>1.7</td>
<td>2,975</td>
</tr>
</tbody>
</table>

### Uses of energy:
- SMUD electric sales and usage: 767, 727 (5.5%) vs. 2,342, 2,244 (4.4%)
- Surplus power sales: 191, 176 (8.5%) vs. 550, 570 (3.5%)
- System losses: 21, 60 (65.0%) vs. 83, 170 (51.2%)

**Total uses of energy**: 979, 963 (1.7%) vs. 2,975, 2,984 (0.3%)

* Change equals 1000% or more.

---

**Net generation is lower than planned for the three-month period.**

- Hydro generation is lower than planned (45.7 percent).
- JPA generation is lower than planned (17.2 percent).

**Purchased power, less surplus power sales, is higher than plan (46.5 percent).**
## SACRAMENTO MUNICIPAL UTILITY DISTRICT
### STATEMENTS OF NET POSITION
March 31, 2022 and 2021
(thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>SMUD</th>
<th>Cosumnes</th>
<th>NCEA</th>
<th>NCGA #1</th>
<th>Intercompany Eliminations</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELECTRIC UTILITY PLANT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant in service, original cost</td>
<td>$5,811,191</td>
<td>$946,971</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$6,758,162</td>
<td>$6,405,677</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>2,707,683</td>
<td>653,675</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,361,358</td>
<td>3,184,201</td>
</tr>
<tr>
<td>Plant in service - net</td>
<td>3,103,508</td>
<td>293,296</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,396,804</td>
<td>3,221,476</td>
</tr>
<tr>
<td>Construction work in progress</td>
<td>409,932</td>
<td>6,773</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>416,705</td>
<td>506,250</td>
</tr>
<tr>
<td>Investment in Joint Power Agencies</td>
<td>308,726</td>
<td>27,889</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>336,615</td>
<td>334,145</td>
</tr>
<tr>
<td>Total electric utility plant - net</td>
<td>3,823,166</td>
<td>300,069</td>
<td>-</td>
<td>-</td>
<td>(282,637)</td>
<td>3,840,598</td>
<td>3,750,379</td>
</tr>
<tr>
<td><strong>RESTRICTED ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue bond reserves</td>
<td>2,931</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,931</td>
<td>3,813</td>
</tr>
<tr>
<td>Restricted for payment of debt service</td>
<td>81,771</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>81,771</td>
<td>81,771</td>
</tr>
<tr>
<td>JPA funds</td>
<td>-</td>
<td>9,852</td>
<td>14,949</td>
<td>17,366</td>
<td>-</td>
<td>42,167</td>
<td>41,209</td>
</tr>
<tr>
<td>Nuclear decommissioning trust fund</td>
<td>8,874</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8,874</td>
<td>8,873</td>
</tr>
<tr>
<td>Rate stabilization fund</td>
<td>193,608</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>193,608</td>
<td>174,444</td>
</tr>
<tr>
<td>Net pension asset</td>
<td>35,738</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35,738</td>
<td>-</td>
</tr>
<tr>
<td>Net OPEB asset</td>
<td>57,532</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>57,532</td>
<td>770</td>
</tr>
<tr>
<td>Plant from unrestricted funds (decommissioning)</td>
<td>12,520</td>
<td>-</td>
<td>3,000</td>
<td>2,001</td>
<td>-</td>
<td>22,521</td>
<td>22,571</td>
</tr>
<tr>
<td>Due (to) from restricted funds (decommissioning)</td>
<td>6,684</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,684</td>
<td>6,684</td>
</tr>
<tr>
<td>Total restricted assets</td>
<td>302,575</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>302,575</td>
<td>193,540</td>
</tr>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash, cash equivalents and investments Unrestricted</td>
<td>536,534</td>
<td>64,162</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>600,696</td>
<td>638,637</td>
</tr>
<tr>
<td>Accounts receivable - net</td>
<td>223,076</td>
<td>40,056</td>
<td>806</td>
<td>2,495</td>
<td>(64,309)</td>
<td>202,124</td>
<td>182,344</td>
</tr>
<tr>
<td>Energy efficiency loans due within one year</td>
<td>201</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>201</td>
<td>2,691</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>779</td>
<td>31</td>
<td>1,766</td>
<td>2</td>
<td>-</td>
<td>1,786</td>
<td>-</td>
</tr>
<tr>
<td>Regulatory costs to be recovered within one year</td>
<td>38,170</td>
<td>104</td>
<td>105</td>
<td>-</td>
<td>-</td>
<td>38,379</td>
<td>38,649</td>
</tr>
<tr>
<td>Derivative financial instruments maturing within one year</td>
<td>73,417</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>73,417</td>
<td>5,306</td>
</tr>
<tr>
<td>Inventories</td>
<td>80,889</td>
<td>19,561</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100,450</td>
<td>87,282</td>
</tr>
<tr>
<td>Prepaid gas to be delivered within one year</td>
<td>18,930</td>
<td>8,923</td>
<td>44,992</td>
<td>2,495</td>
<td>(64,309)</td>
<td>21,313</td>
<td>15,043</td>
</tr>
<tr>
<td>Prepayments and other</td>
<td>1,687,295</td>
<td>142,889</td>
<td>22,768</td>
<td>44,992</td>
<td>(64,309)</td>
<td>1,992,679</td>
<td>1,750,243</td>
</tr>
<tr>
<td>Total current assets</td>
<td>1,687,295</td>
<td>142,889</td>
<td>22,768</td>
<td>44,992</td>
<td>(64,309)</td>
<td>1,992,679</td>
<td>1,750,243</td>
</tr>
<tr>
<td><strong>NONCURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory costs for future recovery Decommissioning</td>
<td>75,220</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>75,220</td>
<td>80,639</td>
</tr>
<tr>
<td>Pension</td>
<td>336,287</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>336,287</td>
<td>353,315</td>
</tr>
<tr>
<td>OPEB</td>
<td>277,817</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>277,817</td>
<td>290,590</td>
</tr>
<tr>
<td>Bond Issues</td>
<td>-</td>
<td>757</td>
<td>-</td>
<td>-</td>
<td>445</td>
<td>1,202</td>
<td>1,412</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>437</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>437</td>
<td>5,717</td>
</tr>
<tr>
<td>Total noncurrent assets</td>
<td>839,386</td>
<td>761</td>
<td>527,625</td>
<td>131,908</td>
<td>1,499,690</td>
<td>1,497,355</td>
<td>1,500,243</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td>$6,032,532</td>
<td>$443,519</td>
<td>$560,393</td>
<td>$176,900</td>
<td>$346,946</td>
<td>$6,856,398</td>
<td>$6,591,517</td>
</tr>
<tr>
<td><strong>DEFERRED OUTFLOWS OF RESOURCES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated decrease in fair value of hedging derivatives</td>
<td>11,136</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11,136</td>
<td>37,486</td>
</tr>
<tr>
<td>Deferred pension outflows</td>
<td>70,767</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>70,767</td>
<td>168,359</td>
</tr>
<tr>
<td>Deferred OPEB outflows</td>
<td>24,059</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24,059</td>
<td>25,413</td>
</tr>
<tr>
<td>Deferred ARO outflows</td>
<td>771</td>
<td>1,664</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,664</td>
<td>1,647</td>
</tr>
<tr>
<td>Unamortized bond losses - other</td>
<td>10,053</td>
<td>1,413</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11,466</td>
<td>14,349</td>
</tr>
<tr>
<td>Total deferred outflows of resources</td>
<td>116,015</td>
<td>3,077</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>119,092</td>
<td>247,254</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</strong></td>
<td>$6,148,547</td>
<td>$446,596</td>
<td>$560,393</td>
<td>$176,900</td>
<td>$346,946</td>
<td>$6,975,490</td>
<td>$6,838,771</td>
</tr>
</tbody>
</table>
## SACRAMENTO MUNICIPAL UTILITY DISTRICT

### STATEMENTS OF NET POSITION

March 31, 2022 and 2021

(thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>SMUD</th>
<th>Cosumnes</th>
<th>NCEA</th>
<th>NCGA #1</th>
<th>Intercompany Eliminations</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LONG-TERM DEBT - NET</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,278,810</td>
<td>$98,884</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$550,578</td>
<td>$142,935</td>
</tr>
<tr>
<td>CURRENT LIABILITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>$3,071,207</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>88,889</td>
<td>11,842</td>
<td>99</td>
<td>1,411</td>
<td></td>
<td>-</td>
<td>102,241</td>
</tr>
<tr>
<td>Purchased power payable</td>
<td>70,515</td>
<td>23,562</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>29,768</td>
</tr>
<tr>
<td>Credit support collateral obligation</td>
<td>1,683</td>
<td>-</td>
<td>-</td>
<td>2,001</td>
<td>(64,309)</td>
<td>3,684</td>
<td></td>
</tr>
<tr>
<td>Long-term debt due within one year</td>
<td>100,150</td>
<td>11,450</td>
<td>-</td>
<td>20,550</td>
<td></td>
<td>-</td>
<td>132,150</td>
</tr>
<tr>
<td>Accrued decommissioning</td>
<td>6,889</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>6,889</td>
</tr>
<tr>
<td>Interest payable</td>
<td>21,969</td>
<td>1,265</td>
<td>5,438</td>
<td>348</td>
<td></td>
<td>-</td>
<td>29,020</td>
</tr>
<tr>
<td>Accrued salaries and compensated absences</td>
<td>53,884</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>53,884</td>
</tr>
<tr>
<td>Derivative financial instruments maturing within one year</td>
<td>10,831</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>10,831</td>
</tr>
<tr>
<td>Customer deposits</td>
<td>1,323</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>1,323</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>42,897</td>
<td>-</td>
<td>5,337</td>
<td>24,310</td>
<td>(64,309)</td>
<td>-</td>
<td>42,897</td>
</tr>
<tr>
<td>NONCURRENT LIABILITIES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$399,030</td>
<td>48,119</td>
</tr>
<tr>
<td>Accrued decommissioning - net</td>
<td>77,410</td>
<td>9,021</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>86,431</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>4,702</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>4,702</td>
</tr>
<tr>
<td>Net pension liability</td>
<td>85,989</td>
<td>-</td>
<td>160</td>
<td>-</td>
<td></td>
<td>-</td>
<td>86,149</td>
</tr>
<tr>
<td>Total noncurrent liabilities</td>
<td>168,101</td>
<td>9,021</td>
<td>160</td>
<td>-</td>
<td></td>
<td>-</td>
<td>177,282</td>
</tr>
<tr>
<td>TOTAL LIABILITIES</td>
<td>2,845,941</td>
<td>156,024</td>
<td>556,275</td>
<td>167,245</td>
<td>(64,309)</td>
<td>3,661,176</td>
<td>4,263,098</td>
</tr>
<tr>
<td>DEFERRED INFLOWS OF RESOURCES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated increase in fair value of hedging derivatives</td>
<td>152,064</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>152,064</td>
</tr>
<tr>
<td>Deferred pension inflows</td>
<td>215,221</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>215,221</td>
</tr>
<tr>
<td>Deferred OPEB inflows</td>
<td>86,986</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>86,986</td>
</tr>
<tr>
<td>Regulatory credits</td>
<td>549,590</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>549,590</td>
</tr>
<tr>
<td>Unamortized bond gains - other</td>
<td>8,881</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>8,881</td>
</tr>
<tr>
<td>Unearned revenue</td>
<td>3,353</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>3,398</td>
</tr>
<tr>
<td>TOTAL DEFERRED INFLOWS OF RESOURCES</td>
<td>1,016,095</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
<td>1,016,140</td>
</tr>
<tr>
<td>NET POSITION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at beginning of year</td>
<td>2,292,641</td>
<td>283,722</td>
<td>(6,665)</td>
<td>9,838</td>
<td>(282,539)</td>
<td>2,297,097</td>
<td>1,957,511</td>
</tr>
<tr>
<td>Net increase (decrease) for the year</td>
<td>(6,130)</td>
<td>6,805</td>
<td>619</td>
<td>(217)</td>
<td></td>
<td>1,077</td>
<td>3,137</td>
</tr>
<tr>
<td>Member contributions (distributions) - net</td>
<td>-</td>
<td>64</td>
<td>34</td>
<td>(99)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL NET POSITION</td>
<td>2,286,511</td>
<td>290,527</td>
<td>(5,882)</td>
<td>9,655</td>
<td>(282,637)</td>
<td>2,298,174</td>
<td>1,960,648</td>
</tr>
<tr>
<td>TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION</td>
<td>$ 6,148,547</td>
<td>$ 446,596</td>
<td>$ 550,393</td>
<td>$ 176,900</td>
<td>(346,946)</td>
<td>$ 6,975,490</td>
<td>$ 6,838,771</td>
</tr>
</tbody>
</table>
# SACRAMENTO MUNICIPAL UTILITY DISTRICT
## STATEMENTS OF CASH FLOWS
### For the Period Ended March 31, 2022
(Thousands of dollars)

<table>
<thead>
<tr>
<th>CASH FLOWS FROM OPERATING ACTIVITIES</th>
<th>Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts from customers</td>
<td>$127,242</td>
<td>$358,112</td>
</tr>
<tr>
<td>Receipts from surplus power and gas sales</td>
<td>15,022</td>
<td>48,502</td>
</tr>
<tr>
<td>Other receipts</td>
<td>10,143</td>
<td>28,510</td>
</tr>
<tr>
<td>Payments to employees - payroll and other</td>
<td>(41,789)</td>
<td>(91,049)</td>
</tr>
<tr>
<td>Payments for wholesale power and gas purchases</td>
<td>(50,028)</td>
<td>(161,329)</td>
</tr>
<tr>
<td>Payments to vendors/others</td>
<td>(30,573)</td>
<td>(91,823)</td>
</tr>
<tr>
<td><strong>Net cash provided by operating activities</strong></td>
<td>30,017</td>
<td>90,923</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES</th>
<th>Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest on debt</td>
<td>-</td>
<td>(12,636)</td>
</tr>
<tr>
<td><strong>Net cash used in noncapital financing activities</strong></td>
<td>-</td>
<td>(12,636)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</th>
<th>Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction expenditures</td>
<td>(34,635)</td>
<td>(61,792)</td>
</tr>
<tr>
<td>Contributions in aid of construction</td>
<td>3,170</td>
<td>6,575</td>
</tr>
<tr>
<td>Interest on debt</td>
<td>-</td>
<td>(45,060)</td>
</tr>
<tr>
<td><strong>Net cash used in capital and related financing activities</strong></td>
<td>(31,465)</td>
<td>(100,277)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASH FLOWS FROM INVESTING ACTIVITIES</th>
<th>Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales and maturities of securities</td>
<td>41,763</td>
<td>106,783</td>
</tr>
<tr>
<td>Purchases of securities</td>
<td>(2,403)</td>
<td>(47,632)</td>
</tr>
<tr>
<td>Interest and dividends received</td>
<td>137</td>
<td>889</td>
</tr>
<tr>
<td>Investment revenue/expenses - net</td>
<td>(452)</td>
<td>3,507</td>
</tr>
<tr>
<td><strong>Net cash provided by investing activities</strong></td>
<td>39,045</td>
<td>63,547</td>
</tr>
</tbody>
</table>

Net increase in cash and cash equivalents

Cash and cash equivalents at the beginning of the month and year

<table>
<thead>
<tr>
<th>Cash and cash equivalents at March 31, 2022</th>
<th>Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$830,205</td>
<td>$830,205</td>
<td>$830,205</td>
</tr>
</tbody>
</table>

Cash and cash equivalents included in:

| Unrestricted cash and cash equivalents       | $583,315  | $583,315     |
| Restricted and designated cash and cash equivalents | 42,093   | 42,093       |

Restricted and designated assets (a component of the total of $302,675 at March 31, 2022)

Cash and cash equivalents at March 31, 2022

<table>
<thead>
<tr>
<th>Cash and cash equivalents at March 31, 2022</th>
<th>Month</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$830,205</td>
<td>$830,205</td>
<td>$830,205</td>
</tr>
</tbody>
</table>
## BOARD AGENDA ITEM

### STAFFING SUMMARY SHEET

**Board Meeting Date:** N/A

**Committee Meeting & Date:**
Finance & Audit, 2022

---

<table>
<thead>
<tr>
<th>TO</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Lora Anguay</td>
<td>7.</td>
</tr>
<tr>
<td>4.</td>
<td>9. Legal</td>
</tr>
<tr>
<td>5.</td>
<td>10. CEO &amp; General Manager</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consent Calendar</th>
<th>Yes</th>
<th>No</th>
<th>If no, schedule a dry run presentation.</th>
<th>Budgeted</th>
<th>Yes</th>
<th>No</th>
<th>If no, explain in Cost/Budgeted section.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FROM (IPR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russell Mills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEPARTMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAIL STOP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B355</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXT.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6509</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE SENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/28/21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NARRATIVE:

**Requested Action:** Provide the summary of SMUD’s current Power Supply Costs.

**Summary:** Staff will present the summary of SMUD’s current Power Supply Costs to the Board of Directors.

**Board Policy:** GP-3, Board Job Description

**Benefits:** Provides Board members with current power supply costs information for SMUD.

**Cost/Budgeted:** N/A

**Alternatives:** N/A

**Affected Parties:** SMUD

**Coordination:** Accounting and Treasury

**Presenter:** Lisa Limcaco

---

**SUBJECT** Summary of SMUD’s current Power Supply Costs

---

*ITEM NO.* (FOR LEGAL USE ONLY)

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.
TO
1. Jennifer Davidson
2. Lora Anguay
3. Scott Martin
4.
5.
6.
7.
8.
9. Legal
10. CEO & General Manager

Consent Calendar | Yes | x | No (If no, schedule a dry run presentation.) | Budgeted | Yes | No (If no, explain in Cost/Budgeted section.)
FROM (IPR) | DEPARTMENT | MAIL STOP | EXT. | DATE SENT
Rosanna Herber / Donna Lofton | Board Office | B307 | 5079 | 12/21/2021

NARRATIVE:

Requested Action: A summary of directives provided to staff during the committee meeting.

Summary: The Board requested an on-going opportunity to do a wrap up period at the end of each committee meeting to summarize various Board member suggestions and requests that were made at the meeting in an effort to make clear the will of the Board. The Policy Committee Chair will summarize Board member requests that come out of the committee presentations for this meeting.

Board Policy: GP-4 Agenda Planning states the Board will focus on the results the Board wants the organization to achieve.

Benefits: Having an agendized opportunity to summarize the Board’s requests and suggestions that arise during the committee meeting will help clarify what the will of the Board.

Cost/Budgeted: N/A

Alternatives: Not summarize the Board’s requests at this meeting.

Affected Parties: Board of Directors and Executive Staff

Coordination: Donna Lofton, Special Assistant to the Board

Presenter: Rosanna Herber, Finance and Audit Committee Chair

Additional Links:

ITEM NO. (FOR LEGAL USE ONLY)