

Board Energy Resources & Customer Services Committee Meeting and Special SMUD Board of Directors Meeting

Date: Wednesday, March 16, 2022

Time: Scheduled to begin at 5:30 p.m.

Location: Virtual Meeting (online)

Powering forward. Together.



AGENDA BOARD ENERGY RESOURCES & CUSTOMER SERVICES COMMITTEE MEETING AND SPECIAL SMUD BOARD OF DIRECTORS MEETING

Wednesday, March 16, 2022

Scheduled to begin at 5:30 p.m.

**Zoom Webinar Link: [Join Board Energy Resources & Customer Services
Committee Meeting Here](#)**

Webinar/Meeting ID: 161 462 7932

Passcode: 147463

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 his 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 Energy Resources & Customer Services Committee will review, discuss and provide the Committee's recommendation on the following:

DISCUSSION ITEM

1. Jon Olson
 - a. Authorize the Chief Executive Officer and General Manager (CEO/GM), or his designee, to negotiate and execute a 10-year **Power Purchase Agreement (PPA)** consisting of two confirmations with **Geysers Power Company, LLC** for 100 MW of geothermal energy, substantially in the form attached.
 - b. Approve the **California Energy Commission (CEC) Emission Performance Standard (EPS)** compliance filing and authorize the CEO/GM, or his designee, to sign the compliance filing attestation.
- Presentation: 10 minutes
Discussion: 10 minutes

INFORMATIONAL ITEMS

2. Lora Anguay
Mark Willis
Joyce Hribar
Jon Olson
Ed Hamzawi
Tom Jas
Erik Krause
Jose Bodipo-Memba
Russell Mills
Steve Lins
Provide an informational presentation and executive summary report on the 2030 Zero Carbon Plan.
Presentation: 75 minutes
Discussion: 20 minutes
3. Public Comment
4. Gregg Fishman
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 his 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.

SSS No. ET&C 22-010

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date

ERCS March 16, 2022

Board Meeting Date

March 17, 2022

TO					TO						
1.	Jon Olson				6.	Lora Anguay					
2.	Jon Anderson				7.	Stephen Clemons					
3.	Scott Martin				8.	Frankie McDermott					
4.	Jennifer Davidson				9.	Legal					
5.	Brandy Bolden				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) Jon Olson				DEPARTMENT Energy Trading & Contracts				MAIL STOP A404		EXT. DATE SENT 7378 02/14/2022	
NARRATIVE:											
<p>Requested Action:</p> <p>a. Authorize the Chief Executive Officer and General Manager (CEO/GM), or his designee, to negotiate and execute a 10-year Power Purchase Agreement (PPA) consisting of two confirmations with Geysers Power Company, LLC for 100 MW of geothermal energy, substantially in the form attached.</p> <p>b. Approve the California Energy Commission (CEC) Emission Performance Standard (EPS) compliance filing and authorize the CEO/GM, or his designee, to sign the compliance filing attestation.</p> <p>Summary:</p> <p>In 2021, Calpine (the parent company of Geysers Power Company, LLC) approached SMUD with a competitive offer under which SMUD will purchase the energy, capacity, and environmental attributes, including Portfolio Content Category 1 Renewable Energy Credits (PCC1 RECs) from its Geysers project in Lake and Sonoma Counties. The Geysers project provides SMUD around-the-clock, carbon-free baseload 100MWs of geothermal energy (including PCC1 RECs) plus 100 MWs of resource adequacy capacity, which SMUD can export from the CAISO as firm capacity. The delivery term is January 1, 2023, through December 31, 2032. The 2030 Zero Carbon Plan specifically identifies the need for incorporation of a geothermal resource into the SMUD portfolio.</p> <p>Senate Bill 1368 (2006) prohibits publicly-owned utilities from entering into covered long-term procurements that do not meet the greenhouse gas EPS adopted by the CEC. CEC regulations provide that power plants that meet the criteria of a renewable electricity generation facility, as defined by the California Renewables Portfolio Standard (RPS) legislation and guidelines, are “determined to be compliant” with the EPS. The Geysers Power Company’s geothermal project qualifies for RPS and is therefore determined to be compliant. The EPS regulations require the SMUD Board make a determination whether this prospective covered procurement complies with the EPS by approving the compliance filing and also requires SMUD submit the compliance filing to the CEC within 10 business days following execution of the PPA.</p> <p>Board Policy: (Number & Title)</p> <p>SD-2, Competitive Rates; SD-4, Reliability; SD-7, Environmental Leadership; SD-9 Resource Planning: This contract provides economic, zero carbon power and will be a key contributor to achieving our 2030 Zero Carbon Plan. Allows access to relatively low cost and carbon-free power generated and delivered to CAISO.</p> <p>Benefits:</p> <p>876,000 MWh/year of carbon-free energy and PCC1 RECs generated in California as well as 100MWs of firm capacity each hour for resource adequacy.</p> <p>Cost/Budgeted:</p> <p>The expenses for the project have been included in our financial forecast. The annual cost is approximately \$61.3 million for energy, RECs, and capacity.</p> <p>Alternatives:</p> <p>Rely on other sources for carbon-free energy.</p>											

Affected Parties:	Energy Trading & Contracts, Energy Settlements, Resource Strategy, Budget Office, Grid Operations, Treasury, and Commodity Risk Management.
Coordination:	Energy Trading & Contracts and Legal
Presenter:	Jon Olson, Director of Energy Trading & Contracts

Additional Links:

SUBJECT	Geysers 100 MW Geothermal PPA	ITEM NO. (FOR LEGAL USE ONLY)
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.



CALPINE

DRAFT

Geysers Power Company, LLC
10350 Socrates Mine Road
Middletown, CA 95416

**WESTERN SYSTEMS POWER POOL AGREEMENT
CONFIRMATION LETTER (ENERGY)
BETWEEN GEYSERS POWER COMPANY, LLC
AND
SACRAMENTO MUNICIPAL UTILITY DISTRICT**

"CONFIDENTIALITY NOTICE: The information is intended only for the use of the individual or entity named below. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this transmission in error, please immediately notify us by telephone to arrange for return of the documents."

To: Sacramento Municipal Utility District
Attention: [REDACTED]
Email: [REDACTED]
From: Geysers Power Company, LLC
Re: Deal Number: [REDACTED]

This Confirmation sets forth the terms and conditions of the transaction between Buyer and Seller, each individually a "Party" and together the "Parties," as of the Effective Date specified below, in which Seller agrees to sell and deliver, and Buyer agrees to purchase and receive, the Product, as such term is defined herein (the "Transaction"). This Transaction is subject to the terms and conditions of the Western Systems Power Pool Agreement (Effective Version: July 28, 2020) together with any and all exhibits, schedules or supplements thereto or incorporated therein by reference, as amended or modified, each in force and effect from time to time between the Parties (collectively, the "WSPP Agreement"), as amended and supplemented by this Confirmation. The definitions and provisions contained in the WSPP Agreement and in the tariffs and protocols of the California Independent System Operator ("CAISO"), as amended from time to time ("Tariff"), shall apply to this Confirmation Agreement and are incorporated by reference; provided that, to the extent that this Confirmation Agreement is inconsistent with any provision of the WSPP Agreement, this Confirmation shall govern the rights and obligations of the Parties hereunder. This Confirmation, together with the WSPP Agreement will constitute a single agreement between the Parties with respect to the Transaction. This Confirmation supersedes and replaces any prior oral or written confirmation or agreement, including broker confirmations, regarding this Transaction.

We confirm the following terms of our Transaction:

Buyer: Sacramento Municipal Utility District

Seller: Geysers Power Company, LLC

Effective Date: March __, 2022

Delivery Term: The "Delivery Term" shall be from January 1, 2023 to December 31, 2032, inclusive. Notwithstanding the foregoing, for the sole purpose of matching delivery of Renewable Energy Credits (RECs) with Delivered Energy from

the Project, such period will extend through the date that all RECs associated with such energy have been delivered from Seller to Buyer in accordance with this Confirmation.

Product: “Product” means Delivered Energy on an hourly basis which meets the criteria for Section 399.16(b)(1)(A) of the California Public Utilities Code, comprised of: (1) energy, (2) RECs generated by the Project and transferred by Seller through a WREGIS Certificate to Buyer under this Confirmation, and (3) all Green Attributes associated with the renewable energy delivered to Buyer as part of this Confirmation. To the extent not inconsistent with the foregoing, the Product is a Resource Contingent Bundled REC as such is described under Section R-2.3.4 of WSPP Service Schedule R. The Product does not include any other non-renewable and non-environmental attributes (e.g., ancillary services or resource adequacy capacity). Buyer may use the Product for any RPS, voluntary programs, or any other purpose.

Project: The term “Project” means one or more of the geothermal power plants owned or controlled by Seller and located in Lake and Sonoma Counties, California that will be used to provide the Contract Quantity. Due to the portfolio nature of the Geysers, Buyer acknowledges that Seller is making sales and deliveries from the Project to other purchasers. **Exhibit A** identifies each of the plants as of the Effective Date. Following the Effective Date, Seller may add or remove generating facilities to Exhibit A with prior written notice to Buyer, and any added plants will thereafter be considered part of the Project for all purposes under this Confirmation, provided that each facility added is a geothermal power plant certified by the CEC as an ERR and meets the RPS compliance requirements for PCC 1; provided, that, to the extent that addition of the generating facility(ies) was not approved by the CEC prior to delivery, delivery of Product from the added generating facility(ies) is conditioned on the CEC making a final decision pursuant to the California Code of Regulations, Title 20, Section 2910 that the covered procurement complies with EPS, and, in the event the CEC makes a final decision that the added generating facility(ies) does not comply with the EPS, the change to Exhibit A shall be void and all pending Product deliveries from such added generating facility(ies) shall be terminated no later than the effective date of the CEC’s decision; provided, further, that Buyer’s consent shall be required to remove generating facilities from Exhibit A for reasons other than repair, mothballing, decommissioning, Uncontrollable Forces, or the sale of such facility.

Delivery Point: “Delivery Point” means NP 15 EZ Gen Hub.

Meter Data: To provide evidence of Delivered Energy, in connection with submission of its monthly invoice and upon the request of Buyer, Seller shall provide to Buyer records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation and delivery of the Delivered Energy by the Project (and upon Buyer’s reasonable request access to any records, including invoices or settlement data from the CAISO, necessary to verify the invoice).

Payment: For each MWh of Delivered Energy in accordance with this Confirmation, not to exceed the Contract Quantity, Buyer shall pay Seller the Contract Price, which has no escalation during the Delivery Term. "Contract Price" is as follows:

Contract Years	Price (\$/MWh)
2023-2032	

Contract Quantity:

Contract Years	Contract Quantity
2023-2032	100 MW delivered each hour on a 7x24 hour schedule

Renewable Energy Credit Certificates:

To provide evidence of Green Attributes, Seller shall transfer to Buyer the RECs to Buyer's WREGIS account(s) within fifteen (15) Business Days after WREGIS creates certificates from each month's meter data (approximately four months after flow under current WREGIS operating conditions). If Buyer's WREGIS account ID is not available as of the start of the Delivery Term, Buyer will provide it to Seller promptly once Buyer receives the WREGIS account ID. REC deliveries will be made by transfer of WREGIS Certificates to Buyer's WREGIS account pursuant to WREGIS Operating Rules. Seller shall, at its option, transfer the WREGIS Certificate using forward certificated transfer or any other transfer permitted under the WREGIS Operating Rules. With respect to REC deliveries, Product flow shall be considered the month in which the WREGIS Certificates are created by WREGIS under current operating conditions.

Scheduling and CAISO Revenues:

Seller shall provide (or cause to be provided) all Scheduling Coordinator services for the Project (and all units constituting the Project) and for delivery of Product to the Delivery Point. Buyer shall provide (or cause to be provided) all Scheduling Coordinator services for Product at and from the Delivery Point. The Parties will purchase and sell the Contract Quantity of Product through Inter-SC Trades scheduled on a Day-Ahead basis at the NP15 EZ Gen Hub in compliance with the CAISO Tariff. As between Buyer and Seller, Seller shall be responsible for all CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and payments) associated with the Project and the delivery of Product to the Delivery Point.

ADDITIONAL TERMS:

- a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an ERR; and (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a Change in Law occurs after execution of this Agreement that causes this representation and warranty to be

materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such Change in Law.

- b) Seller shall agree to reasonably assist Buyer with Buyer's California Renewables Portfolio Standard Program compliance filings as requested by Buyer. In connection with the foregoing, neither Seller nor its affiliates shall be required to (i) expend or incur any legal costs (either internal or external) in providing such assistance or (ii) prepare or defend a filing or otherwise advocate on behalf of Buyer.
- c) This Agreement and the rights and duties of the Parties hereunder shall be governed by and construed, enforced and performed in accordance with the laws of the state of California, without regard to principles of conflicts of Law.
- d) Seller shall, at its sole cost and expense, take all actions and execute all documents or instruments necessary to ensure that the RECs sold hereunder can be transferred to Buyer utilizing WREGIS. Seller shall comply with all laws, including, without limitation, the WREGIS Operating Rules effective as of the date of this Confirmation regarding the certification and transfer of RECs sold hereunder to Buyer. During the Delivery Term, Seller shall have in-place, or shall submit documentation to establish, an account with WREGIS. Seller shall transfer RECs to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules. Seller shall be responsible for all customary expenses associated with WREGIS Certificate issuance fees and utilizing WREGIS to transfer the RECs to Buyer, or its designee, except for any costs incurred by Buyer with respect to Buyer's registration with WREGIS and Buyer's WREGIS account.
- e) Seller hereby provides and conveys all Green Attributes associated with the electricity generation from the Project delivered to Buyer as part of the Product. Seller represents and warrants that Seller holds the rights to all such Green Attributes, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project.
- f) Because WREGIS Certificates will only be created for whole MWh amounts of output generated, any fractional MWh amounts will be carried forward during the Delivery Term until sufficient generation is accumulated for the creation of a WREGIS Certificate.
- g) Seller shall be responsible, at its sole expense, for validating, adjusting, and disputing data with WREGIS so that the data from the Project's meter(s) corresponds with the quantity of RECs conveyed hereunder. Upon request Seller shall provide Buyer with copies of all correspondence or documentation to or from WREGIS with respect to any such validation, adjustment, or dispute.
- h) Without limiting Seller's obligations, if a WREGIS Certificate deficit is caused solely by an error or omission of WREGIS or the California Independent System Operator, the Parties shall cooperate in good faith to cause WREGIS to correct its error or omission. If WREGIS changes the WREGIS Operating Rules after the Effective Date or applies the WREGIS Operating Rules in a manner inconsistent with this Confirmation, the Parties promptly shall modify this Agreement as reasonably required to preserve the intended economic benefits of this transaction for both Parties, and so cause and enable Seller to transfer to Buyer's WREGIS Account the RECs sold to Buyer hereunder.
- i) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the RECs transferred to Buyer conform to the definition

and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a Change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such Change in Law.

- j) Seller warrants that all necessary steps to allow the RECs transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.
- k) Notwithstanding anything else in this Confirmation, and subject to Seller's obligations under this Confirmation, Buyer acknowledges and agrees that the sale of energy and RECs by Seller from the Project is nonexclusive.
- l) Confidentiality: Seller acknowledges that Buyer is a public agency subject to the requirements of the California Public Records Act (Cal. Gov. Code section 6250 et seq.).
- m) Change in Law: Seller shall make commercially reasonable efforts to comply with Changes in Law in the California RPS, provided that Seller shall not be required to incur costs greater than an aggregate amount of \$500,000 during the entire Delivery Term (the "Capped Amount"). The Parties acknowledge and agree that any such Change in Law shall not (i) entitle Buyer to a change in the Contract Price or Payment terms, (ii) result in any change to the Contract Quantity, (iii) give either Party the right to terminate this Agreement, or (iv) allow for the severability of any provisions of this Confirmation pursuant to the WSPP Agreement. This provision shall not apply to any Product that was Delivered and Accepted prior to any Change in Law if such Product complies with the California RPS.
- n) Seller Credit Requirements: Concurrently with the execution of this Confirmation, Seller and Buyer are entering into that certain Non-RA Export Capacity Transaction Confirmation of even date herewith (the "Non-RA Export Capacity Confirmation"). Seller shall post and maintain from time to time security in the amounts and for the periods set forth on **Schedule 1** to secure its obligations under both this Confirmation and the Non-RA Export Capacity Confirmation; provided that Buyer may only draw on such security pursuant to this Confirmation to recover damages payable under this Confirmation. If the Non-RA Export Capacity Confirmation is terminated for any reason, but this Confirmation continues in force, the amounts on **Schedule 1** will be reduced to reflect the proportionate reduction in Buyer's overall exposure as a result of the termination of the Non-RA Export Capacity Confirmation, and the Parties will amend and replace **Schedule 1** to reflect this reduction within thirty (30) days after termination of the Non-RA Export Capacity Confirmation. Such security may be provided in cash or by a letter of credit in the form attached hereto as **Exhibit D**. On the dates when the required amount of such security is reduced as set forth on **Schedule 1**, if the security has been provided in cash, Buyer shall return any cash security that it holds in excess of the required amount, and if the security has been provided in the form of a letter of credit, Buyer will cooperate with Seller in substituting a revised letter of credit in the appropriate amount for the one held by Buyer. Once Seller has achieved an Investment Grade Rating, Seller shall no longer be required to post security under this Confirmation or the Non-RA Export Capacity Confirmation. Buyer shall return any cash or letters of credit held as security hereunder to Seller within 30 days after written notice from Seller that it has achieved an Investment Grade Rating.

- o) Buyer Credit Requirements. As long as Buyer maintains an Investment Grade Rating, Buyer will not be required to provide security for the performance of its obligations hereunder and under the Non-RA Export Capacity Confirmation. If Buyer ceases to maintain an Investment Grade Rating, Buyer will promptly provide Seller notice thereof and will, within 30 days after ceasing to maintain an Investment Grade Rating, post and thereafter maintain from time to time security in the amounts and for the periods set forth on Schedule 1 (as amended, if applicable) to secure its obligations under both this Confirmation and the Non-RA Export Capacity Confirmation; provided that Seller may only draw on such security pursuant to this Confirmation to recover damages payable under this Confirmation. Such security may be provided in cash or by a letter of credit in the form attached hereto as Exhibit D (with such changes as are necessary for a letter of credit to be delivered by Buyer to Seller). On the dates when the required amount of such security is reduced as set forth on Schedule 1, if the security has been provided in cash, Seller shall return any cash security that it holds in excess of the required amount, and if the security has been provided in the form of a letter of credit, Seller will cooperate with Buyer in substituting a revised letter of credit in the appropriate amount for the one held by Seller. If Buyer subsequently regains an Investment Grade Rating, shall not be required to post security under this Confirmation. Seller shall return any cash or letters of credit held as security hereunder to Buyer within 30 days after written notice from Buyer that it has achieved an Investment Grade Rating.
- p) Buyer Limited Assignment Right: Notwithstanding anything to the contrary in Section 14 of the Master Agreement, the Buyer may from time to time assign the right to receive all or a portion of the Delivered Energy that would otherwise be delivered to Buyer hereunder. In connection with any such assignment, Buyer and Seller agree to negotiate in good faith the execution of the limited assignment agreement attached hereto as Exhibit B. For the avoidance of doubt, any limited assignment will not affect Seller or Buyer's rights or responsibilities under this Agreement except to the extent set forth in the limited assignment, and Buyer will remain responsible for all its obligations under this Agreement related to such assignment, including (i) the obligation to pay for such Delivered Energy to the extent the assignee thereof does not do so, and (ii) any damages associated with such assignee's failure to take any such Delivered Energy.
- q) Seller Permitted Assignment: Notwithstanding anything to the contrary in Section 14 of the Master Agreement, Seller may, without the prior written consent of Buyer, transfer or assign this Agreement to a Qualified Transferee. A Qualified Transferee is : (1) any affiliate of Seller, or (2) any person succeeding to all or substantially all of the assets of Seller (whether voluntary or by operation of law) that (i) for the three (3) preceding years, has owned or operated (or had access to the expertise required to operate through committed management agreements with its affiliates at least 100MWs of renewable energy generation facilities and (ii) either itself or its direct or indirect parent, has (x) a tangible net worth of at least \$50,000,000 or (y) a credit rating of "BB-" or higher by S&P or "Ba3" or higher by Moody's; provided that Seller shall provide at least fifteen (15) Business Days notice to Buyer prior to any such transfer or assignment, Seller shall not be relieved of its obligations under the Agreement prior to the effective date of the transfer or assignment, and Seller's assignee shall agree in writing to assume all of Seller's obligations and liabilities under this Agreement.
- r) Seller Collateral Assignment: Seller may also assign this Agreement as collateral for any financing or refinancing of the Facility. In connection with any financing or refinancing of the Facility by Seller, Buyer shall in good faith work with Seller and its lender to execute a consent to collateral assignment of this Agreement substantially in the form attached

hereto as **Exhibit C**.

- s) **Governing Law**. Notwithstanding anything in the WSPP Agreement, including Section 24 thereof, to the contrary, the Agreement shall be governed by the laws of the State of California (without reference to conflict of laws rules that would apply the law of another jurisdiction).
- t) **Counterparts**. This Confirmation may be signed in any number of counterparts with the same effect as if the signatures to the counterparts were upon a single instrument. The Parties may rely on electronic, or scanned signatures as originals under this Confirmation. Delivery of an executed signature page of this Confirmation by electronic mail transmission (including PDF) shall be the same as delivery of a manually executed signature page.
- u) **Emission Performance Standard**. This Agreement is a “covered procurement” under the CEC’s EPS and Buyer shall make the required compliance filing with the CEC within 10 Business Days of the Effective Date. The Parties agree that this Agreement shall be void and all pending Product deliveries terminated no later than the effective date of any final decision by the CEC pursuant to the California Code of Regulations, Title 20, Section 2910 that the covered procurement fails to comply with EPS. The Parties acknowledge that the Project is “determined to be compliant” pursuant to 20 CCR §§ 2903(b)(1) or (2).
- v) **WSPP Agreement Amendments**. For this Transaction, the WSPP Agreement shall be amended as follows:
 - 1. Section 21.1 of the WSPP Agreement is amended by deleting “other direct” in the ninth line thereof. The Parties also agree that the waiver on the fifth line of that section does not apply to any damages or other remedies expressly provided for in this Confirmation.
 - 2. Section 21.3(a) of the WSPP Agreement is modified by (i) deleting the words “as follows” in the sixth line of the first sentence thereof and substituting the phrase “as set forth in the applicable Confirmation”, (ii) deleting subsections (1), (2) and (3) thereof, (iii) deleting the phrase “and the Contract Price of the Confirmation to which the non-performed transaction is identified, and the Contract Quantity of the non-performed transaction, shall be applied to the calculation of amounts due under Section 21.3(a)(1) through (3), as applicable” at the end of the first paragraph of subsection (5) thereof and substituting the phrase “and damages shall be calculated in accordance with the applicable Confirmations”, and (iv) deleting the balance of subsection (5) after the first two paragraphs thereof.
 - 3. Section 21.3(d) of the WSPP Agreement is modified by (i) changing “the full amount of damages” on the second and third lines to “the undisputed amount of damages”, and (ii) deleting the second sentence thereof.
 - 4. Section 22.1 of the WSPP Agreement is modified by deleting subsection (d) and replacing it with [intentionally omitted]” and by inserting the following new text at the end thereof:

“(f) the failure of the Defaulting Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party’s obligations to deliver or receive the

quantities of Product due under this Agreement, the exclusive remedy for which is provided in Section 21.3) if such failure is not remedied within thirty (30) days after written notice;

(g) the termination of the Non-RA Export Capacity Confirmation as the result of a default by the Defaulting Party thereunder;

(h) the failure of the Defaulting Party to pay its debts generally as they become due or the Defaulting Party's admission in a writing that is unable to generally pay its debts as they become due;

(i) the institution, by the Defaulting Party, of a general assignment for the benefit of its creditors; or

(j) the application for, consent to, or acquiescence to, by the Defaulting Party, the appointment of a receiver, custodian, trustee, liquidator, or similar official for all or a substantial portion of its assets."

5. Section 22.2(b) of the WSPP Agreement is amended by (i) inserting in Section 22.2, "and is continuing" after "Event of Default occurs" in the first line of the first paragraph thereof, (ii) deleting the second sentence in the first paragraph thereof, and (iii) deleting the second paragraph thereof in its entirety.

6. Section 22.3 of the WSPP Agreement is amended by:

(a) In Section 22.3(b), replacing the second sentence thereof with "The "Present Value Rate" shall mean an annual rate equal to the "prime rate" as published in the Wall Street Journal from time to time plus 2%.";

(b) In Section 22.3(c), deleting the third sentence thereof and replacing it with the following: "If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement or a Confirmation, the Termination Payment for all such Terminated Transactions shall be zero, notwithstanding any provision in this Section or Agreement to the contrary."

(c) In Section 22.3(e), delete the entire provision (including subsections) and replace it with the following: "[Intentionally omitted]"

(d) In Section 22.3(f), delete the entire provision and replace it with the following:

"If the Defaulting Party disagrees with the calculation of the Termination Payment and the Parties cannot otherwise resolve their differences, and provided that Defaulting Party has paid the undisputed part of the Termination Payment to the Non-Defaulting Party as provided under Section 22.3(c), and that any amounts disputed by the Defaulting Party are disputed in good faith, then the Defaulting Party may submit the calculation issue to Dispute Resolution pursuant to Section 34."

7. Section 24 of the WSPP Agreement is amended by deleting "Utah" in the second line thereof and replacing it with "California".

8. Section 27 of the WSPP Agreement is deleted in its entirety and replaced with “[intentionally omitted]”.
9. The netting provisions of Section 28, NETTING, of the WSPP Agreement shall apply to the transaction covered by this Confirmation as if Buyer and Seller had both executed Exhibit A, NETTING, to the WSPP Agreement. Both Parties intend for the netting provisions of Exhibit A to the WSPP Agreement to be effective on the first day of the Delivery Term.
10. Section 30.1 of the WSPP Agreement is amended by inserting “or requested” after the word “required” in Section 30.1(4), by deleting “or” immediately before clause (7), and by adding the following at the end of the first sentence: “; or (8) to the Party’s and such Party’s affiliates’ lenders and potential lenders, investors or potential investors, counsel, accountants, advisors and agents who have a need to know such information and have agreed to keep such terms confidential”.
11. Section 31 of the WSPP Agreement is amended by deleting the second sentence thereof.
12. The second and third sentences of Section 32.5 of the WSPP Agreement are deleted.
13. Sections 34.1 and 34.2 of the WSPP Agreement are hereby deleted and replaced with the following:

“34.1 INFORMAL DISPUTE RESOLUTION

IN THE EVENT OF ANY DISPUTE ARISING UNDER THIS TRANSACTION, WITHIN TEN (10) DAYS FOLLOWING THE RECEIPT OF A WRITTEN NOTICE FROM EITHER PARTY IDENTIFYING SUCH DISPUTE, THE PARTIES SHALL MEET, NEGOTIATE AND ATTEMPT, IN GOOD FAITH, TO RESOLVE THE DISPUTE QUICKLY, INFORMALLY AND INEXPENSIVELY. IF THE PARTIES ARE UNABLE TO RESOLVE A DISPUTE ARISING HEREUNDER WITHIN THIRTY (30) DAYS AFTER RECEIPT OF SUCH NOTICE, THEN EITHER PARTY MAY SEEK ANY AND ALL REMEDIES AVAILABLE TO IT AT LAW OR IN EQUITY, SUBJECT TO THE LIMITATIONS SET FORTH IN THIS TRANSACTION.”

“34.2 EXCLUSIVE JURISDICTION

EACH PARTY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE OR FEDERAL COURTS LOCATED IN SAN FRANCISCO, CALIFORNIA, FOR ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY TRANSACTION, AND EXPRESSLY WAIVES ANY OBJECTION IT MAY HAVE TO SUCH JURISDICTION OR THE CONVENIENCE OF SUCH FORUM.”

14. The phrase “arbitration or” is hereby deleted from the first line of Section 34.4.
15. The following shall be inserted as a new Section 34.5:

“34.5 LIMITATION OF DAMAGES. FOR BREACH OF ANY PROVISION OF THIS CONFIRMATION AGREEMENT FOR WHICH AN EXPRESS REMEDY OR

MEASURE OF DAMAGES IS PROVIDED, THE EXPRESS REMEDY OR MEASURE OF DAMAGES PROVIDED IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT AND ALL OTHER REMEDIES FOR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED IN THIS AGREEMENT FOR A PARTICULAR BREACH, LIABILITY FOR THE BREACH IS LIMITED TO DIRECT DAMAGES ONLY, WHICH SHALL BE THE SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT FOR SUCH BREACH, AND ALL OTHER REMEDIES FOR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. NEITHER PARTY IS LIABLE FOR ANY OTHER TYPE OF DAMAGE, INCLUDING INCIDENTAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES OF ANY NATURE (INCLUDING DAMAGES ASSOCIATED WITH LOST PROFITS, BUSINESS INTERRUPTION AND LOSS OF GOODWILL) ARISING AT ANY TIME, WHETHER IN TORT (INCLUDING THE SOLE OR CONTRIBUTORY NEGLIGENCE OF EITHER PARTY OR ANY RELATED PERSON), WARRANTY, STRICT LIABILITY, CONTRACT OR STATUTE, UNDER ANY INDEMNITY PROVISION, OR OTHERWISE; PROVIDED, HOWEVER, THAT THE FOREGOING SHALL NOT LIMIT EITHER PARTY'S RIGHT TO RECOVER DAMAGES UNDER EXPRESS INDEMNITY PROVISIONS SET FORTH IN THE CONFIRMATION."

16. Section 37 of the WSPP Agreement is amended by inserting the following in the beginning of the section: "On the date of entering into this Confirmation,".
17. Section 41 "Witness" of the WSPP Agreement is renumbered Section 42 and the following new Section 41 entitled "Standard of Review" shall be inserted between Sections 40 and 42:

41. STANDARD OF REVIEW

The Parties agree as follows:

41.1 Absent the agreement of all Parties to the proposed change, the standard of review for changes to any section of this Agreement (including all Transactions and/or Confirmations) specifying the rate(s) or other material economic terms and conditions agreed to by the Parties herein, whether proposed by a Party, a non-party or FERC acting sua sponte, shall be the "public interest" standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956) (the "Mobile-Sierra" doctrine) and clarified in *Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish* 554 U.S. 527 (2008) and *NRG Power Marketing LLC v. Maine Pub. Util. Comm'n*, 558 U.S. 165 (2010).

41.2 The Parties, for themselves and their successors and assigns, (i) agree that this "public interest" standard shall apply to any proposed changes in any other documents, instruments or other agreements executed or entered into by the Parties in connection with this Agreement and (ii) hereby expressly and irrevocably waive any rights they can or may have to the application of any other standard of review, including the "just and reasonable" standard.

ADDITIONAL DEFINITIONS:

“Agreement” or “agreement” has the meaning specified in the introductory paragraph hereof.

“CAISO” means the California Independent System Operator Corporation or any successor entity performing similar functions.

“CAISO Grid” means the system of transmission lines and associated facilities of the Participating Transmission Owner that have been placed under the CAISO’s operational control.

“CAISO Tariff” means the CAISO Operating Agreement and Tariff, including the rules, protocols, procedures and standards attached thereto, as it may be amended, modified, supplemented or replaced (in whole or in part) from time to time.

“California Renewables Portfolio Standard” or “RPS” means the renewable energy program and policies established by California State Senate Bills 1038 and 1078 as amended, and codified in California Public Utilities Code Sections 399.11 through 399.31 and California Public Resources Code Sections 25740 through 25751, as such provisions are amended or supplemented from time to time and as defined by the CEC RPS Eligibility Guidebook, as those obligations may be amended or supplemented from time to time or otherwise consistent with applicable regulations promulgated by the CEC.

“CEC” means the California Energy Commission, or any successor entity.

“CPUC” means the California Public Utilities Commission, or any successor entity.

“Credit Rating” means, with respect to Seller, the rating on its senior secured long-term debt obligations by S&P or Moody’s. If Seller is rated by both S&P and Moody’s, and the Credit Ratings are not equivalent, the lower Credit Rating shall govern.

“Delivered Energy” means energy generated and metered from the Project with associated Green Attributes that is scheduled in accordance with this Confirmation.

“Eligible Renewable Energy Resource” or “ERR” means an Eligible Renewable Energy Resource as defined in California Public Utilities Code Section 399.12 or 399.16 and California Public Resources Code Section 25471, as either code may be amended or supplemented from time to time, as defined in the CEC Renewables Portfolio Standard Eligibility Guidebook, as may be amended or supplemented from time to time.

“Emission Performance Standard” or “EPS” means the requirements set-forth in California Code of Regulations (CCR) Title 20, Chapter 11, Article 1. Section 2900 et seq.

“Green Attributes” means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to RECs, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (Sox), nitrogen oxides (Nox), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere; (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting

Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

"Green Tag Purchaser" means Buyer.

"Investment Grade Rating" means a rating of BBB- or better from S&P or a rating of Baa3 or better from Moody's.

"Locational Marginal Price" has the meaning specified in the CAISO Tariff.

"Moody's" means Moody's Investors Service, Inc.

"NERC" means the North American Electric Reliability Corporation.

"Non-RA Export Capacity Confirmation" has the meaning defined in Section (n) of the "Additional Terms" above.

"NP15 EZ Gen Hub" has the meaning specified in the CAISO Tariff.

"Participating Transmission Owner" means Pacific Gas and Electric Company in its capacity as the owner of certain transmission facilities placed under the operational control of the CAISO pursuant to the terms of the CAISO Tariff.

"Portfolio Content Category 1" or "PCC1" means renewable energy comprised of energy and Green Attributes meeting the criteria defined by the CEC Renewables Portfolio Standard Eligibility Guidebook, for Portfolio Content Category 1, as may be amended or supplemented from time to time, and meeting any applicable regulations promulgated by the CEC.

"Renewable Energy Credit" or "REC" has the meaning set forth in the California Public Utilities Code Section 399.12, as may be amended or supplemented from time to time or as further supplemented by applicable law, is evidenced by a WREGIS Certificate, and is equivalent to one (1) MWh of energy from the Project which shall be qualified and certified as an ERR.

"S&P" means Standard & Poor's Financial Services LLC.

"Scheduling Coordinator" means an entity certified by CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff for the purposes of undertaking the functions specified in "Responsibilities of a Scheduling Coordinator," of the CAISO Tariff, as amended from time to time.

“WREGIS” means Western Renewable Energy Generating Information System.

“WREGIS Certificate” has the same meaning as “Certificate” as defined by WREGIS in the WREGIS Operating Rules and are designated by applicable law as eligible for complying with the California Renewables Portfolio Standard.

“WREGIS Operating Rules” means the operating rules and requirements adopted by WREGIS, as amended from time to time.

[SIGNATURE PAGE FOLLOWS]

ACKNOWLEDGED AND AGREED TO AS OF THE EFFECTIVE DATE:

Geysers Power Company, LLC

Sacramento Municipal Utility District

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

SCHEDULE 1**Amount of Required Security**

Period	Amount
1/1/2023-12/31/2023	\$5,000,000
1/1/2024-12/31/2024	\$5,000,000
1/1/2025-12/31/2025	\$5,000,000
1/1/2026-12/31/2026	\$5,000,000
1/1/2027-12/31/2027	\$4,000,000
1/1/2028-12/31/2028	\$4,000,000
1/1/2029-12/31/2029	\$3,000,000
1/1/2030-12/31/2030	\$3,000,000
1/1/2031-12/31/2031	\$2,000,000
1/1/2032-3/31/2032	\$2,000,000
4/1/2032-6/30/2032	\$1,500,000
7/1/2032-9/30/2032	\$1,000,000
10/1/2032-12/31/2032	\$500,000

EXHIBIT A

Project Information

Name of Facility	CEC RPS ID
Aidlin Power Plant	60115A
Sonoma Power Plant	60010A
Geysers Units 5&6	60002A
Geysers Units 7&8	60003A
Geysers Unit 11	60025A
Geysers Unit 12	60004A
Geysers Unit 13	60005A
Geysers Unit 14	60026A
Geysers Unit 16	60006A
Geysers Unit 17	60007A
Geysers Unit 18	60008A
Calistoga Power Plant	60117A
Geysers Unit 20	60009A

EXHIBIT B

Form of Limited Assignment Agreement

This Limited Assignment Agreement (this “**Assignment Agreement**” or “**Agreement**”) is entered into as of [____], 20__ by and among [____], a [____] (“**PPA Seller**”), [Participant], a [____] (“**PPA Buyer**”), and [Assignee], and relates to that certain power purchase agreement (the “**PPA**”) between PPA Buyer and PPA Seller as described on Appendix 1. Unless the context otherwise specifies or requires, capitalized terms used but not defined in this Agreement have the meanings set forth in the PPA. To the extent there is any inconsistency between this Assignment Agreement and the PPA, the terms of the PPA shall prevail.

In consideration of the premises above and the mutual covenants and agreements herein set forth, PPA Seller, PPA Buyer and [Assignee] (the “**Parties**” hereto; each is a “**Party**”) agree as follows:

1. Limited Assignment and Delegation.

- (a) PPA Buyer hereby assigns, transfers and conveys to [Assignee] all right, title and interest in and to the rights of the Delivered Energy under the PPA described on Appendix 1 (the “**Assigned Products**”) during the Assignment Period (as defined in Appendix 1), as such rights may be limited or further described in the “Further Information” section on Appendix 1 (the “**Assigned Product Rights**”). All Assigned Products shall be delivered pursuant to the terms and conditions of this Agreement during the Assignment Period as provided in Appendix 1. All other rights of PPA Buyer under the PPA are expressly reserved for PPA Buyer.
- (b) PPA Buyer hereby delegates to [Assignee] the obligation to pay for all Assigned Products that are actually delivered to [Assignee] pursuant to the Assigned Product Rights during the Assignment Period (the “**Delivered Product Payment Obligation**” and together with the Assigned Product Rights, collectively the “**Assigned Rights and Obligations**”). All other obligations of PPA Buyer under the PPA are expressly retained by PPA Buyer. To the extent [Assignee] fails to pay for any Assigned Products by the due date for payment set forth in the PPA, PPA Buyer agrees that it will remain jointly and severally responsible as primary obligor (and not as surety) for such payment within five (5) Business Days (as defined in the PPA) of receiving notice of such non-payment from PPA Seller and that, regardless of receiving such notice, it will indemnify and hold PPA Seller harmless from and against all losses, costs, damages, liabilities and expenses of any kind as a result of or arising from assignment, transfer, conveyance and delegation described in clauses (a) and (b) of this paragraph 1, the failure of [Assignee] to make any such payment in respect of Delivered Product Payment Obligation as and when due under the PPA (and disregarding the effects of any stay or other suspension rights, including without limitation under sections 362 or 365 of the Bankruptcy Code or similar laws), whether due to bankruptcy, insolvency or any other cause.
- (c) [Assignee] hereby accepts and PPA Seller hereby consents and agrees to the assignment, transfer, conveyance and delegation described in clauses (a) and (b) above.
- (d) All scheduling of Assigned Products and other communications related to the PPA shall take place between PPA Buyer and PPA Seller pursuant to the terms of the PPA; provided

that (i) title to Assigned Product will pass from PPA Seller to [Assignee] upon delivery by PPA Seller of Assigned Product in accordance with the PPA; (ii) PPA Buyer is hereby authorized by [Assignee] to and shall act as [Assignee]'s agent with regard to scheduling Assigned Product; (iii) PPA Buyer will promptly provide copies to [Assignee] of any Notice (as defined in the PPA) that PPA Buyer sends or receives pursuant to the PPA; (iv) PPA Seller will provide copies to [Assignee] of all invoices and supporting data provided to PPA Buyer pursuant to the PPA (provided that failure to provide such copies shall not excuse the performance of any other Party hereunder so long as in the case of [Assignee], it has received notices of any payments required to be made by it hereunder); and (v) PPA Buyer and PPA Seller, as applicable, will provide copies to [Assignee] of any other information reasonably requested by [Assignee] relating to Assigned Products (provided that failure of PPA Seller to provide such information shall not excuse the performance of any other Party hereunder).

- (e) [PPA Seller acknowledges that (i) [Assignee] intends to immediately transfer title to any Assigned Products received from PPA Seller through one or more intermediaries such that all Assigned Products will be re-delivered to PPA Buyer, and (ii) [Assignee] owns or has the right to purchase receivables due from PPA Buyer for any such Assigned Products. To the extent [Assignee] owns or purchases any valid, lien-free receivables due from PPA Buyer for Assigned Product, [Assignee] may transfer good, marketable and lien-free title to such receivables to PPA Seller and, so long as PPA Buyer does not have any defense in respect of such receivables other than a defense that would have arisen under the PPA if this Assignment Agreement were not in effect apply the face amount thereof as a reduction to any Delivered Product Payment Obligation owed by [Assignee] to PPA Seller; provided that no such transfer or application shall reduce or limit PPA Buyer's obligations under Section 1(b) above].
- (f) In the event the PPA described on Appendix 1 or the Assigned Product Rights are rejected or terminated or both, in or as a result of any bankruptcy, insolvency, reorganization or similar proceeding affecting [Assignee], PPA Buyer shall, at the option of PPA Seller exercised within 30 days after such rejection or termination, enter into a new agreement with PPA Seller having identical terms as the PPA described on Appendix 1 (subject to any conforming changes necessitated by the substitution of parties and other changes as the parties may mutually agree), provided that the term under such new agreement shall be no longer than the remaining balance of the term specified in the PPA described on Appendix 1.

2. Assignment Early Termination.

- (a) The Assignment Period may be terminated early upon the occurrence of any of the following:
 - (1) delivery of a written notice of termination by either [Assignee] or PPA Buyer to each of the other Parties hereto;
 - (2) delivery of a written notice of termination by PPA Seller to each of [Assignee] and PPA Buyer following [Assignee]'s failure to pay when due any amounts owed to PPA Seller in respect of any Delivered Product Payment Obligation and such failure continues for one business day following receipt by [Assignee] of written notice thereof;

- (3) delivery of a written notice by PPA Seller to the other Parties hereto if any of the events described in Section [] [Bankruptcy] of the PPA occurs with respect to [Assignee]; or
 - (4) delivery of a written notice by [Assignee] if any of the events described in Section [] [Bankruptcy] of the PPA occurs with respect to PPA Seller.
- (b) The Assignment Period will end at the end of last delivery hour on the date specified in the termination notice provided pursuant to Section 2(a), which date shall not be earlier than the end of the last day of the calendar month in which such notice is delivered if termination is pursuant to clause (a)(1) or (a)(2) above. All Assigned Rights and Obligations shall revert from [Assignee] to PPA Buyer upon the early termination of the Assignment Period, provided that (i) [Assignee] shall remain responsible for the Delivered Product Payment Obligation with respect to any Assigned Product delivered to [Assignee] prior to the end of the Assignment Period, and (ii) any legal restrictions on the effectiveness of such reversion (whether arising under bankruptcy law or otherwise) shall not affect the expiration or early termination of the Assignment Period in respect of the Parties not subject inter se to such restrictions, provided that [Assignee] will not have any further obligations (other than the obligation pursuant to the foregoing clause (i)) hereunder following an early termination of the Assignment Period regardless of any such legal restrictions on the effectiveness of such reversion.
- (c) The Assignment Period will automatically terminate upon the expiration or early termination of the PPA. All Assigned Rights and Obligations shall revert from [Assignee] to PPA Buyer upon the expiration of or early termination of the PPA, provided that (i) [Assignee] shall remain responsible for the Delivered Product Payment Obligation with respect to any Assigned Product delivered to [Assignee] prior to the end of the Assignment Period, and (ii) any legal restrictions on the effectiveness of such reversion (whether arising under bankruptcy law or otherwise) shall not affect the expiration or early termination of the Assignment Period in respect of the Parties not subject inter se to such restrictions, provided that [Assignee] will not have any further obligations (other than the obligation pursuant to the foregoing clause (i)) hereunder following an early termination of the Assignment Period regardless of any such legal restrictions on the effectiveness of such reversion.

3. Representations and Warranties. The PPA Seller and the PPA Buyer represent and warrant to [Assignee], each with respect to itself only, that as of the date hereof (a) the PPA is in full force and effect; (b) to the best of its knowledge, no event or circumstance exists (or would exist with the passage of time or the giving of notice) that would give either of them the right to terminate the PPA or suspend performance thereunder; and (c) all of its obligations under the PPA required to be performed on or before the date hereof have been fulfilled.

4. Notices. Any notice, demand, or request required or authorized by this Assignment Agreement to be given by one Party to another Party shall be delivered in accordance with Section [] and the Cover Sheet of the PPA and to the addresses of each of PPA Seller and PPA Buyer specified in the PPA. PPA Buyer agrees to notify [Assignee] of any updates to such notice information, including any updates provided by PPA Seller to PPA Buyer. Notices to [Assignee] shall be provided to the following address, as such address may be updated by [Assignee] from time to time by notice to the other Parties:

[_____]

_____]

5. Miscellaneous. Sections ☐ (Buyer's Representations and Warranties), ☐ (Confidential Information), Sections ☐ (Severability), ☐ (Counterparts), ☐ (Amendments), ☐ (No Agency), ☐ (Mobile-Sierra), ☐ (Counterparts), ☐ (Facsimile or Electronic Delivery), Section ☐ (Binding Effect) and ☐ (No Recourse to Members of Buyer) of the PPA are incorporated by reference into this Agreement, *mutatis mutandis*, as if fully set forth herein.

6. U.S. Resolution Stay Provisions.

(a) In the event that [Assignee] becomes subject to a proceeding under (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder or (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder (a "U.S. Special Resolution Regime") the transfer from [Assignee] of this Agreement, and any interest and obligation in or under, and any property securing, this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any interest and obligation in or under, and any property securing, this Agreement were governed by the laws of the United States or a state of the United States.

(b) In the event that [Assignee] or an Affiliate becomes subject to a proceeding under a U.S. Special Resolution Regime, any Default Rights (as defined in 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable ("Default Right")) under this Agreement that may be exercised against [Assignee] are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

(1) Limitation on Exercise of Certain Default Rights Related to an Affiliate's Entry Into Insolvency Proceedings. Notwithstanding anything to the contrary in this Agreement, the Parties expressly acknowledge and agree that:

- i. PPA Buyer and PPA Seller shall not be permitted to exercise any Default Right with respect to this Agreement or any Affiliate Credit Enhancement that is related, directly or indirectly, to an Affiliate of [Assignee] becoming subject to receivership, insolvency, liquidation, resolution, or similar proceeding (an "Insolvency Proceeding"), except to the extent that the exercise of such Default Right would be permitted under the provisions of 12 C.F.R. 252.84, 12 C.F.R. 47.5 or 12 C.F.R. 382.4, as applicable; and
- ii. Nothing in this Agreement shall prohibit the transfer of any Affiliate Credit Enhancement, any interest or obligation in or under such Affiliate Credit Enhancement, or any property securing such Affiliate

Credit Enhancement, to a transferee upon or following an Affiliate of [Assignee] becoming subject to an Insolvency Proceeding, unless the transfer would result in PPA Buyer or PPA Seller being the beneficiary of such Affiliate Credit Enhancement in violation of any law applicable to PPA Buyer or PPA Seller, as applicable.

(2) U.S. Protocol. To the extent that PPA Buyer and PPA Seller each adhere to the ISDA 2018 U.S. Resolution Stay Protocol, as published by the International Swaps and Derivatives Association, Inc. as of July 31, 2018 (the "ISDA U.S. Protocol"), after the date of this Agreement, the terms of the ISDA U.S. Protocol will supersede and replace the terms of this Section 6.

(3) For purposes of this Section 6:

"Affiliate" is defined in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

"Credit Enhancement" means any credit enhancement or credit support arrangement in support of the obligations of [Assignee] under or with respect to this Agreement, including any guarantee, collateral arrangement (including any pledge, charge, mortgage or other security interest in collateral or title transfer arrangement), trust or similar arrangement, letter of credit, transfer of margin or any similar arrangement.

7. Governing Law, Jurisdiction.

(a) Governing Law.

THIS ASSIGNMENT AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES UNDER THIS ASSIGNMENT AGREEMENT WILL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REFERENCE TO ANY CONFLICTS OF LAWS PROVISIONS THAT WOULD DIRECT THE APPLICATION OF ANOTHER JURISDICTION'S LAWS; PROVIDED, HOWEVER, THAT THE AUTHORITY OF THE PPA BUYER TO ENTER INTO AND PERFORM ITS OBLIGATIONS UNDER THIS ASSIGNMENT AGREEMENT SHALL BE DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA.

(b) [Reserved].¹

[Remainder of Page Intentionally Blank]

¹ NOTE: Parties to negotiate and agree upon jurisdiction provision, if any, at the time of execution.

EXHIBIT C

FORM OF
CONSENT AND AGREEMENT

among

[Insert Name of Contracting Party],
a [_____] (Contracting Party)

and

GEYSERS POWER COMPANY, LLC,
a Delaware limited liability company
(Assignor)

and

MUFG UNION BANK, N.A.,
(First Lien Collateral Agent)

Dated as of [____]

This CONSENT AND AGREEMENT, dated as of [____], 20[___] (this “Consent”), is entered into by and among ***[Insert name of Contracting Party]***, a [_____] [organized][formed] and existing under the laws of the State of [_____] (together with its permitted successors and assigns, “Contracting Party”), MUFG UNION BANK, N.A., in its capacity as collateral agent for the First Lien Secured Parties referred to below (together with its successors, designees and assigns in such capacity, “First Lien Collateral Agent”), and GEYSERS POWER COMPANY, LLC, a limited liability company formed and existing under the laws of the State of Delaware (together with its permitted successors and assigns, “Assignor”).

RECITALS

A. Assignor owns the following geothermal electric generating facilities located in the Geysers area of Northern California (Sonoma and Lake Counties) (collectively, the “Projects”):

- (a) The Aidlin project, an approximately 18 megawatt geothermal facility located in Sonoma County, CA.
- (b) The Sonoma project, an approximately 53 megawatt geothermal facility located in Sonoma County, CA.
- (c) The two-unit McCabe project, an approximately 84 megawatt geothermal facility located in Sonoma County, CA.
- (d) The two-unit Ridge Line project, an approximately 76 megawatt geothermal facility located in Sonoma County, CA.
- (e) The Eagle Rock project, an approximately 68 megawatt geothermal facility located in Sonoma County, CA.
- (f) The Cobb Creek project, an approximately 51 megawatt geothermal facility located in Sonoma County, CA.
- (g) The Big Geysers project, an approximately 61 megawatt geothermal facility located in Lake County, CA.
- (h) The Sulphur Springs project, an approximately 47 megawatt geothermal facility located in Sonoma County, CA.
- (i) The Quicksilver project, an approximately 53 megawatt geothermal facility located in Lake County, CA.
- (j) The Lake View project, an approximately 54 megawatt geothermal facility located in Sonoma County, CA.
- (k) The Socrates project, an approximately 50 megawatt geothermal facility located in Sonoma County, CA.
- (l) The two-unit Calistoga project, an approximately 69 megawatt geothermal facility located in Lake County, CA.
- (m) The Grant project, an approximately 41 megawatt geothermal facility located in Sonoma County, CA.

B. In order to finance the operation and maintenance of the Projects, Assignor has

entered into that certain Credit Agreement, dated as of June 9, 2020 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Credit Agreement”), with GEYSERS INTERMEDIATE HOLDINGS LLC, a Delaware limited liability company, as Holdings (“Holdings”), GEYSERS COMPANY, LLC, a Delaware limited liability company (“Geysers Company”), WILD HORSE GEOTHERMAL, LLC, a Delaware limited liability company (“Wild Horse”) and CALISTOGA HOLDINGS, LLC, a Delaware limited liability company (“Calistoga,” and, together with Holdings, Geysers Company and Wild Horse, each a “Guarantor” and together, the “Guarantors”), MUFG BANK, LTD., as administrative agent for the Lenders, MUFG UNION BANK, N.A., as collateral agent for the First Lien Secured Parties, and the financial institutions from time to time parties thereto in such other capacities as described therein (collectively, the “Lenders”).

C. Contracting Party and Assignor have entered into that certain [*Insert description of relevant Major Project Contract(s)*], dated as of [_____] [____], [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time in accordance with the terms thereof and hereof, the “Assigned Agreement”).

D. As security for Assignor’s obligations under the Credit Agreement and related financing documents with respect to the Loans and related obligations, Assignor has granted, pursuant to a security agreement executed by Assignor and First Lien Collateral Agent (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”), to the First Lien Collateral Agent, for the benefit of the First Lien Secured Parties, a first priority lien on all of Assignor’s right, title and interest in the Projects and other rights and interests relating thereto, whenever arising, including, without limitation, the Assigned Agreement and all of Assignor’s right, title and interest under (but not any of Assignor’s obligations, liabilities or duties with respect thereto) the Assigned Agreement;

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and intending to be legally bound, the parties hereto hereby agree, notwithstanding anything in the Assigned Agreement to the contrary, as follows:

1. Assignment and Agreement.

1.1 Consent to Assignment. Contracting Party (a) is hereby notified and acknowledges that the Lenders have entered into the Credit Agreement and made the extensions of credit contemplated thereby in reliance upon the execution and delivery by Contracting Party of the Assigned Agreement and this Consent, (b) consents to the collateral assignment under the Security Agreement of all of Assignor’s right, title and interest in, to and under the Assigned Agreement, including, without limitation, all of Assignor’s rights to receive payment and all payments due and to become due to Assignor under or with respect to the Assigned Agreement (collectively, the “Assigned Interests”) and (c) acknowledges the right of First Lien Collateral Agent or a Subsequent Owner (as defined below), in the exercise of First Lien Collateral Agent’s rights and remedies pursuant to the Security Agreement, upon written notice to Contracting Party, to make all demands, give all notices, take all actions and exercise all rights of Assignor under the Assigned Agreement.

1.2 Subsequent Owner.

(a) Contracting Party agrees that, if First Lien Collateral Agent notifies Contracting Party in writing that, pursuant to the Security Agreement, it has assigned, foreclosed or sold the Assigned Interests or any portion thereof, then (i) First Lien Collateral Agent or its successor, assignee and/or designee, or any purchaser of the Assigned Interests (a “Subsequent Owner”) shall be substituted for Assignor under the Assigned Agreement and (ii) Contracting Party shall (1) recognize First Lien Collateral Agent or the Subsequent Owner, as the case may be, as its counterparty under the Assigned Agreement and (2) continue to perform its obligations under the Assigned Agreement in favor of First Lien Collateral Agent or the Subsequent Owner, as the case may be; provided that First Lien Collateral Agent or such Subsequent Owner, as the case may be, has assumed in writing all of Assignor’s rights and obligations (including, without limitation, the obligation to cure any then existing payment and performance defaults, but excluding any obligation to cure any then existing performance defaults which by their nature are incapable of being cured) under the Assigned Agreement.

(b) ***[Insert the following only if warranties are provided by Contracting Party under the relevant Assigned Agreement:*** Without limiting anything herein, the warranties provided by Contracting Party under the Assigned Agreement shall continue in full force and effect (until the expiration of the applicable warranty periods set forth in the Assigned Agreement) in the event that First Lien Collateral Agent or a Subsequent Owner succeeds to Assignor’s right, title and interest in the Assigned Agreement.]

1.3 Right to Cure. If Assignor defaults in the performance of any of its obligations under the Assigned Agreement, or upon the occurrence or non-occurrence of any event or condition under the Assigned Agreement which would immediately or with the passage of any applicable grace period or the giving of notice, or both, enable Contracting Party to terminate or suspend its performance under the Assigned Agreement (each hereinafter a “default”), Contracting Party shall not terminate or suspend its performance under the Assigned Agreement until it first gives written notice of such default to First Lien Collateral Agent and affords First Lien Collateral Agent a period of at least 15 days (or if such default is a nonmonetary default, such longer period (not to exceed 60 days) as may be required to cure such default) from receipt of such notice to cure such default; provided, however, that (a) if possession of the Projects is necessary to cure such nonmonetary default and First Lien Collateral Agent has commenced foreclosure proceedings, First Lien Collateral Agent shall be allowed a reasonable time to complete such proceedings, and (b) if First Lien Collateral Agent is prohibited from curing any such nonmonetary default by any process, stay or injunction issued by any governmental authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Assignor, then the time periods specified herein for curing a default shall be extended for the period of such prohibition.

1.4 No Amendments.

(a) [reserved]

(b) Except for the Buyer Limited Assignment Right under section (p) of the Additional Terms of the Assigned Agreement, Contracting Party agrees that it shall not, without the prior written consent of First Lien Collateral Agent, which consent shall not be unreasonably withheld, (i) sell, assign or otherwise transfer any of its rights under the Assigned Agreement, (ii) terminate, cancel or suspend its performance under the Assigned Agreement (unless it has given First Lien Collateral Agent notice and an opportunity to cure in accordance with Section 1.3 hereof), (iii) consent to any

assignment or other transfer by Assignor of its rights under the Assigned Agreement, or (iv) consent to any voluntary termination, cancellation or suspension of performance by Assignor under the Assigned Agreement.

1.5 Replacement Agreements. In the event the Assigned Agreement is rejected or terminated as a result of any bankruptcy, insolvency, reorganization or similar proceeding affecting Assignor, Contracting Party shall, at the option of First Lien Collateral Agent exercised within 30 days after such rejection or termination, enter into a new agreement with First Lien Collateral Agent having identical terms as the Assigned Agreement (subject to any conforming changes necessitated by the substitution of parties and other changes as the parties may mutually agree), provided that (i) the term under such new agreement shall be no longer than the remaining balance of the term specified in the Assigned Agreement, and (ii) upon execution of such new agreement, First Lien Collateral Agent cures any outstanding payment and performance defaults under the Assigned Agreement, excluding any performance defaults which by their nature are incapable of being cured.

1.6 Limitations on Liability. Unless and until First Lien Collateral Agent has assumed Assignor's rights and obligations under the Assigned Agreement or entered into a new agreement, Contracting Party acknowledges and agrees that First Lien Collateral Agent shall not have any liability or obligation to Contracting Party under the Assigned Agreement as a result of this Consent, the Security Agreement or otherwise, nor shall First Lien Collateral Agent be obligated or required to (a) perform any of Assignor's obligations under the Assigned Agreement, except during any period in which First Lien Collateral Agent has assumed Assignor's rights and obligations under the Assigned Agreement pursuant to Section 1.2[(a)] above, or (b) take any action to collect or enforce any claim for payment assigned under the Security Agreement. If First Lien Collateral Agent has assumed Assignor's rights and obligations under the Assigned Agreement pursuant to Section 1.2[(a)] above or has entered into a new agreement pursuant to Section 1.5 above, First Lien Collateral Agent shall be subject to liability and obligations to Contracting Party under the Assigned Agreement or such new agreement for the period that it is party to the Assigned Agreement or such new agreement.

1.7 Delivery of Notices. Contracting Party shall deliver to First Lien Collateral Agent, concurrently with the delivery thereof to Assignor, a copy of each notice, request or demand given by Contracting Party to Assignor pursuant to the Assigned Agreement relating to (a) a default by Assignor under the Assigned Agreement, and (b) any matter that would require the consent of First Lien Collateral Agent pursuant to Section 1.4 above.

1.8 Transfer. First Lien Collateral Agent shall have the right to assign all of its interest in the Assigned Agreement or a new agreement entered into pursuant to the terms of this Consent; provided that such transferee assumes in writing the obligations of Assignor or First Lien Collateral Agent, as applicable, under the Assigned Agreement or such new agreement. Upon such assignment, First Lien Collateral Agent shall be released from any further liability under the Assigned Agreement or such new agreement to the extent of the interest assigned.

1.9 Refinancing. [Contracting Party hereby acknowledges that Assignor may, from time to time during the term of the Assigned Agreement, refinance the indebtedness incurred under the Credit Agreement pursuant to another bank financing, an institutional financing, a capital markets financing, a lease financing or any other combination thereof or other form of financing. In connection with any such refinancing, Contracting Party hereby consents to any collateral assignment or other assignment of the Assigned Agreement in connection therewith and agrees that the terms and provisions of this Consent

shall apply with respect to such assignment and shall inure to the benefit of the parties providing such refinancing. In furtherance of the foregoing, Contracting Party agrees that (i)(1) references in this Consent to the “First Lien Collateral Agent” and the “First Lien Secured Parties” shall be deemed to be references to the applicable financing parties providing such refinancing, and (2) references in this Consent to the “Credit Agreement” and the “Security Agreement” shall be deemed to be references to the corresponding agreements entered into in connection with such refinancing, and (ii) if reasonably requested by Assignor, it shall enter into a new consent, substantially in the form of this Consent (including any material changes from this form of Consent as may be agreed by Contracting Party) in favor of the parties providing such refinancing.]²

[Insert the following only if Contracting Party is an Affiliate of Assignor under the relevant Assigned Agreement: 1.10 No Obligations. Notwithstanding anything to the contrary herein or in the Assigned Agreement, in the event that First Lien Collateral Agent or its designee(s) or assignee(s) succeed to the Assignor’s interest under the Assigned Agreement or foreclose on the equity interests of Assignor, First Lien Collateral Agent or its designee or assignee shall have the right, which must be exercised within thirty (30) days following such person succeeding to Assignor’s interest under the Assigned Agreement or such foreclosure on the Assignor’s equity interests, to terminate the Assigned Agreement upon written notice to Contracting Party and neither it nor any First Lien Secured Party nor the Assignor shall have any further obligations under the Assigned Agreement, including without limitation, obligations in respect of the payment of any fees, commissions or expenses, provided that such termination shall not affect obligations incurred prior to the date of termination for services provided.]

2. Payments under the Assigned Agreement.

2.1 Payments. Contracting Party shall pay all amounts (if any) payable by it under the Assigned Agreement in the manner and as and when required by the Assigned Agreement directly into the account specified on Exhibit A hereto, or to such other person, entity or account as shall be specified from time to time by First Lien Collateral Agent to Contracting Party in writing. Notwithstanding the foregoing, if any entity or person has become a Subsequent Owner pursuant to the terms hereof, then Contracting Party shall pay all such amounts directly to such Subsequent Owner or an account designated by Subsequent Owner.

2.2 No Offset, Etc. All payments required to be made by Contracting Party under the Assigned Agreement shall be made without any offset, recoupment, abatement, withholding, reduction or defense whatsoever, other than those allowed by the terms of the Assigned Agreement.

3. Representations and Warranties of Contracting Party. Contracting Party hereby represents and warrants, in favor of First Lien Collateral Agent, as of the date hereof, that:

(a) Contracting Party (i) is a [] duly **[formed]****[organized]** and validly existing under the laws of the State of [], (ii) is duly qualified, authorized to do business and in good standing in every jurisdiction necessary to perform its obligations under the Assigned Agreement and this Consent, and (iii) has all requisite power and authority to enter into and to perform its obligations hereunder and under the Assigned Agreement, and to carry out the terms hereof and thereof and the transactions

² This Section 1.9 to be included at Borrowers election and with such changes as Borrower may reasonably request.

contemplated hereby and thereby;

(b) the execution, delivery and performance by Contracting Party of this Consent and the Assigned Agreement have been duly authorized by all necessary corporate or other action on the part of Contracting Party and do not require any approvals, filings with, or consents of any entity or person which have not previously been obtained or made;

(c) each of this Consent and the Assigned Agreement is in full force and effect, has been duly executed and delivered on behalf of Contracting Party by the appropriate officers of Contracting Party, and constitutes the legal, valid and binding obligation of Contracting Party, enforceable against Contracting Party in accordance with its terms, except as the enforceability thereof may be limited by (i) bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights generally, and (ii) general equitable principles (whether considered in a proceeding in equity or at law);

(d) there is no litigation, action, suit, proceeding or investigation pending or (to the best of Contracting Party's knowledge) threatened against Contracting Party before or by any court, administrative agency, arbitrator or governmental authority, body or agency which, if adversely determined, individually or in the aggregate, (i) could adversely affect the performance by Contracting Party of its obligations hereunder or under the Assigned Agreement, or which could modify or otherwise adversely affect any required approvals, filings or consents which have previously been obtained or made, (ii) could have a material adverse effect on the condition (financial or otherwise), business or operations of Contracting Party, or (iii) questions the validity, binding effect or enforceability hereof or of the Assigned Agreement, any action taken or to be taken pursuant hereto or thereto or any of the transactions contemplated hereby or thereby;

(e) the execution, delivery and performance by Contracting Party of this Consent and the Assigned Agreement, and the consummation of the transactions contemplated hereby and thereby, will not result in any violation of, breach of or default under any term of its formation or governance documents, or of any contract or agreement to which it is a party or by which it or its property is bound, or of any license, permit, franchise, judgment, injunction, order, law, rule or regulation applicable to it, other than any such violation, breach or default which could not reasonably be expected to have a material adverse effect on Contracting Party's ability to perform its obligations under the Assigned Agreement;

(f) neither Contracting Party nor, to the best of Contracting Party's knowledge, any other party to the Assigned Agreement, is in default of any of its obligations thereunder;

(g) to the best of Contracting Party's knowledge, (i) no event of force majeure exists under, and as defined in, the Assigned Agreement, and (ii) no event or condition exists which would either immediately or with the passage of any applicable grace period or giving of notice, or both, enable either Contracting Party or Assignor to terminate or suspend its obligations under the Assigned Agreement; and

(h) the Assigned Agreement, this Consent, the Limited Assignment (a form of which is attached as Exhibit B to the Assigned Agreement, if and when signed, and that certain [WSPP Export Non-Resource Adequacy Confirmation] dated [] between Assignor and Contracting Party are the only agreements between Assignor and Contracting Party with respect to the Project, and all of the conditions precedent to effectiveness under the Assigned Agreement have been satisfied or waived.

Each of the representations and warranties set forth in this Section 3 shall survive the execution and delivery of this Consent and the Assigned Agreement and the consummation

of the transactions contemplated hereby and thereby.

4. Miscellaneous.

4.1 Notices. Any communications between the parties hereto or notices provided herein to be given may be given to the following addresses:

If to Assignor:

[Insert Address of GEYSERS POWER COMPANY, LLC]

Facsimile: []

Telephone: []

Attention: []

If to Contracting Party:

Facsimile: _____

Telephone: _____

Attention: _____

If to First Lien Collateral Agent:

Facsimile: _____

Telephone: _____

Attention: _____

All notices or other communications required or permitted to be given hereunder shall be in writing and shall be considered as properly given (a) if delivered in person, (b) if sent by overnight delivery service (including Federal Express, UPS, DHL and other similar overnight delivery services), (c) in the event overnight delivery services are not readily available, if mailed by first class United States Mail, postage prepaid, registered or certified with return receipt requested, (d) if sent by prepaid telegram or by facsimile or (e) if sent by other electronic means (including electronic mail) confirmed by facsimile or telephone. Any party may change its address for notice hereunder by giving of 30 days' notice to the other parties in the manner set forth hereinabove.

4.2 Governing Law; Submission to Jurisdiction.

(a) THIS CONSENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE CONSTRUED IN ACCORDANCE WITH, AND BE GOVERNED BY, THE LAWS OF THE STATE OF NEW YORK (WITHOUT GIVING EFFECT TO THE PRINCIPLES THEREOF RELATING TO CONFLICTS OF LAW EXCEPT SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW).

(b) Any legal action or proceeding with respect to this Consent and any action for enforcement of any judgment in respect thereof may be brought in the courts of the State of New York or of the United States of America for the Southern District of New York, and, by execution and delivery of this Consent, Contracting Party hereby accepts for itself and in respect of its property, generally and unconditionally, the non-exclusive jurisdiction of the aforesaid courts and appellate courts from any appeal

thereof. Contracting Party irrevocably consents to the service of process out of any of the aforementioned courts in any such action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to Contracting Party at its notice address provided pursuant to Section 4.1 hereof. Contracting Party hereby irrevocably waives any objection which it may now or hereafter have to the laying of venue of any of the aforesaid actions or proceedings arising out of or in connection with this Consent brought in the courts referred to above and hereby further irrevocably waives and agrees not to plead or claim in any such court that any such action or proceeding brought in any such court has been brought in an inconvenient forum. Nothing herein shall affect the right of First Lien Collateral Agent to serve process in any other manner permitted by law or to commence legal proceedings or otherwise proceed against Contracting Party in any other jurisdiction.

4.3 Counterparts. This Consent may be executed in any number of counterparts and by the different parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument. Delivery of an executed counterpart to this Consent by facsimile or “pdf” transmission shall be as effective as delivery of a manually signed original.

4.4 Headings Descriptive. The headings of the several sections and subsections of this Consent are inserted for convenience only and shall not in any way affect the meaning or construction of any provision of this Consent.

4.5 Severability. In case any provision in or obligation under this Consent shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

4.6 Amendment, Waiver. Neither this Consent nor any of the terms hereof may be terminated, amended, supplemented, waived or modified except by an instrument in writing signed by Contracting Party and First Lien Collateral Agent.

4.7 Successors and Assigns. This Consent shall bind and benefit Contracting Party, First Lien Collateral Agent, and their respective successors and assigns.

4.8 Third Party Beneficiaries. Contracting Party and First Lien Collateral Agent hereby acknowledge and agree that the First Lien Secured Parties are intended third party beneficiaries of this Consent.

4.9 [intentionally omitted]

4.10 Entire Agreement. This Consent and any agreement, document or instrument attached hereto or referred to herein integrate all the terms and conditions mentioned herein or incidental hereto and supersede all oral negotiations and prior writings between the parties hereto in respect of the subject matter hereof. In the event of any conflict between the terms, conditions and provisions of this Consent and any such agreement, document or instrument (including, without limitation, the Assigned Agreement), the terms, conditions and provisions of this Consent shall prevail.

4.11 Termination of Consent. This Consent shall terminate upon the earliest to occur of (a) the termination or cancellation of the Assigned Agreement in accordance with its terms and in accordance with the terms of this Consent (it being understood that this Consent shall not terminate but shall remain in effect in the circumstances described in Section 1.5 above in respect of any new agreement entered into in accordance with such Section), (b) the expiration of the term of the Assigned Agreement and (c) the termination

of the Security Agreement in accordance with its terms.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto, by their officers duly authorized, intending to be legally bound, have caused this Consent and Agreement to be duly executed and delivered as of the date first above written.

GEYSERS POWER COMPANY, LLC,
a Delaware limited liability company,
as Assignor

By: _____
Name:
Title:

[Insert Name of Contracting Party],
a [_____] ,
as Contracting Party

By: _____
Name:
Title:

Accepted and Agreed to:

MUFG UNION BANK, N.A.,
solely in its capacity as First Lien Collateral Agent

By: _____
Name:
Title:

By: _____
Name:
Title:

EXHIBIT A to
Consent and Agreement

PAYMENT INSTRUCTIONS

[INSERT PAYMENT INSTRUCTIONS FOR APPROPRIATE ACCOUNT(S)]

EXHIBIT D

FORM OF LETTER OF CREDIT

IRREVOCABLE STANDBY LETTER OF CREDIT NO. _____

MUFG UNION BANK, N.A.

TRADE SERVICE OPERATIONS

1980 SATURN STREET, V02-906

MONTEREY PARK, CALIFORNIA 91755-7417

ATTENTION: STANDBY LETTER OF CREDIT SECTION

DATE: _____, 20__

BENEFICIARY	APPLICANT
Sacramento Municipal Utility District	Calpine Corporation on behalf of Geysers Power Company, LLC.

LADIES AND GENTLEMEN:

AT THE REQUEST AND FOR THE ACCOUNT OF CALPINE CORPORATION (THE 'APPLICANT'), 717 TEXAS AVENUE, SUITE 1000, HOUSTON, TEXAS 77002, AND ON BEHALF OF GEYSERS POWER COMPANY, LLC (THE "ACCOUNT PARTY") WE, MUFG UNION BANK, N.A (THE "ISSUER"), HEREBY ESTABLISH, EFFECTIVE IMMEDIATELY, IN YOUR FAVOR SACRAMENTO MUNICIPAL UTILITY DISTRICT THE "BENEFICIARY") OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. _____ IN THE AGGREGATE AMOUNT OF _____ NO/100 UNITED STATES DOLLARS (U.S. \$_____.00) (AS SUCH AMOUNT MAY BE REDUCED FROM TIME TO TIME BY PARTIAL DRAWS HEREUNDER, THE "STATED AMOUNT").

WE ARE INFORMED BY THE APPLICANT THAT THIS LETTER OF CREDIT IS BEING ISSUED PURSUANT TO, AND IN ACCORDANCE WITH THAT CERTAIN TRANSACTION CONFIRMATION, DATED AS OF _____, BETWEEN THE ACCOUNT PARTY AND THE BENEFICIARY (THE "AGREEMENT").

THIS LETTER OF CREDIT IS ISSUED, PRESENTABLE AND PAYABLE AT THE OFFICE LOCATED AT MUFG UNION BANK, N.A. TRADE SERVICE OPERATIONS, 1980 SATURN STREET V02-906 MONTEREY PARK CALIFORNIA 91755-7417 ATTENTION: STANDBY LETTER OF CREDIT SECTION, AND EXPIRES WITH OUR CLOSE OF BUSINESS ON _____, 20__ (THE "EXPIRATION DATE"); PROVIDED THAT THIS LETTER OF CREDIT SHALL BE DEEMED AUTOMATICALLY EXTENDED WITHOUT AN AMENDMENT FOR A ONE YEAR PERIOD BEGINNING ON SUCH EXPIRATION DATE HEREOF, AND UPON EACH ANNIVERSARY OF SUCH DATE, UNLESS AT LEAST SIXTY (60) DAYS PRIOR TO ANY SUCH EXPIRATION DATE, WE HAVE SENT YOU WRITTEN NOTICE BY COURIER SERVICE OR OVERNIGHT MAIL AT THE ABOVE ADDRESS THAT WE ELECT NOT TO PERMIT THIS LETTER OF CREDIT TO BE SO EXTENDED BEYOND, AND WILL EXPIRE ON ITS THEN CURRENT

EXPIRATION DATE. NO PRESENTATION MADE UNDER THIS LETTER OF CREDIT AFTER SUCH EXPIRATION DATE WILL BE HONORED..

FUNDS IN PAYMENT OF A DRAWING UNDER THIS LETTER OF CREDIT ARE AVAILABLE TO THE BENEFICIARY BY PAYMENT AGAINST PRESENTATION AT THE OFFICE AS STIPULATED HEREIN ABOVE, OF THE BENEFICIARY'S SIGNED AND APPROPRIATELY COMPLETED SIGHT DRAFT(S) IN THE FORM OF EXHIBIT 1 ATTACHED HERETO, THE BENEFICIARY'S SIGNED AND APPROPRIATELY COMPLETED DRAWING CERTIFICATE(S) IN THE FORM OF EXHIBIT 2 ATTACHED HERETO AND COPIES OF THE ORIGINAL LETTER OF CREDIT AND AMENDMENTS (IF ANY).

IF A DRAWING IS PRESENTED, ON OR PRIOR TO THE EXPIRATION DATE, AT THE ADDRESS NOTED ABOVE, DELIVERED TO US BY OVERNIGHT COURIER OR FAXED TO US AT XXX-XXX-XXXX AT OR PRIOR TO 11:00 A.M. CALIFORNIA TIME ON A BUSINESS DAY, PAYMENT OF THE AMOUNT SPECIFIED IN SUCH DRAFT SHALL BE MADE ON THE THIRD SUCCEEDING BUSINESS DAY. IF SUCH DRAFT IS PRESENTED AT OUR COUNTERS, DELIVERED TO US BY OVERNIGHT COURIER OR FAXED TO US AFTER 11:00 A.M. CALIFORNIA TIME ON A BUSINESS DAY, PAYMENT OF THE AMOUNT SPECIFIED IN SUCH DRAFT SHALL BE MADE ON THE FOURTH SUCCEEDING BUSINESS DAY.

PARTIAL AND MULTIPLE DRAWINGS ARE PERMITTED HEREUNDER. ANY DRAWING HONORED HEREUNDER BY THE ISSUER SHALL REDUCE THE STATED AMOUNT AVAILABLE FOR DRAWINGS BY THE AMOUNT OF ANY DRAWING HONORED BY THE ISSUER.

THIS LETTER OF CREDIT IS NOT TRANSFERABLE.

ALL BANKING CHARGES ASSOCIATED WITH THIS LETTER OF CREDIT ARE FOR THE ACCOUNT OF THE APPLICANT.

AS USED HEREIN, "BUSINESS DAY" MEANS ANY DAY OTHER THAN SATURDAY, SUNDAY OR A LEGAL HOLIDAY IN LOS ANGELES, CALIFORNIA.

THIS LETTER OF CREDIT IS SUBJECT TO AND GOVERNED BY THE INTERNATIONAL STANDBY PRACTICES, INTERNATIONAL CHAMBER OF COMMERCE (ICC) PUBLICATION NO. 590 ("ISP98"). AS TO MATTERS NOT ADDRESSED BY THE ISP98, AND TO THE EXTENT NOT INCONSISTENT WITH THE ISP98, THIS LETTER OF CREDIT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (INCLUDING, WITHOUT LIMITATION, ARTICLE 5 OF THE UNIFORM COMMERCIAL CODE OF THE STATE OF NEW YORK).

THIS LETTER OF CREDIT SETS FORTH IN FULL THE TERMS OF OUR UNDERTAKING AND SUCH UNDERTAKING SHALL NOT IN ANY WAY BE MODIFIED, AMENDED OR AMPLIFIED BY REASON OF OUR REFERENCE TO ANY AGREEMENTS OR INSTRUMENT REFERRED TO OR IN WHICH THIS LETTER OF CREDIT IS REFERRED TO. ANY SUCH AGREEMENTS OR INSTRUMENT SHALL NOT BE DEEMED INCORPORATED HEREIN BY REFERENCE.

SINCERELY,

MUFG UNION BANK, N.A.

NAME: _____

TITLE: _____

EXHIBIT 1

[BENEFICIARY LETTERHEAD]

SIGHT DRAFT

[DATE]

MUFG UNION BANK, N.A.
TRADE SERVICE OPERATIONS
1980 SATURN STREET, V02-906
MONTEREY PARK, CALIFORNIA 91755-7417
ATTENTION: STANDBY LETTER OF CREDIT SECTION

RE: IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER ירירירי _____

FOR THE VALUE RECEIVED, PAY TO THE ORDER OF _____ BY WIRE TRANSFER OF
IMMEDIATELY AVAILABLE FUNDS TO THE FOLLOWING ACCOUNT:

[NAME OF ACCOUNT]
[ACCOUNT NUMBER]
[NAME AND ADDRESS OF BANK AT WHICH ACCOUNT IS MAINTAINED]
[ABA NUMBER]
[REFERENCE]

THE FOLLOWING AMOUNT:

[INSERT NUMBER OF DOLLARS IN WRITING] UNITED STATES DOLLARS
(US\$ [INSERT NUMBER OF DOLLARS IN FIGURES])

DRAWN UPON YOUR LETTER OF CREDIT NO. _____ DATED _____, 2010

BY: _____

NAME: _____

TITLE: _____

EXHIBIT 2

DRAWING CERTIFICATE

[DATE]

MUFG UNION BANK, N.A.
TRADE SERVICE OPERATIONS
1980 SATURN STREET, V02-906
MONTEREY PARK, CALIFORNIA 91755-7417
ATTENTION: STANDBY LETTER OF CREDIT SECTION

RE: IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER _____

LADIES AND GENTLEMEN:

THE UNDERSIGNED, A DULY AUTHORIZED OFFICER OF _____ (THE "BENEFICIARY") OF THE CAPTIONED LETTER OF CREDIT (THE "LETTER OF CREDIT"), HEREBY CERTIFIES TO MUFG UNION BANK, N.A. (THE "ISSUER") WITH RESPECT TO THE LETTER OF CREDIT (THE TERMS DEFINED THEREIN AND NOT OTHERWISE DEFINED HEREIN BEING USED HEREIN AS THEREIN DEFINED) THAT:

- (1) [_____] (THE "ACCOUNT PARTY") HAS DEFAULTED UNDER [THAT CERTAIN WESTERN STATES POWER POOL CONFIRMATION LETTER (ENERGY) DATED MARCH __, 2022 BETWEEN THE ACCOUNT PARTY AND THE BENEFICIARY] [AND] THAT CERTAIN NON-RA EXPORT CAPACITY CONFIRMATION DATED MARCH __, 2022 BETWEEN THE ACCOUNT PARTY AND THE BENEFICIARY] (THE "AGREEMENT[S]"); AND
- (2) THE AMOUNT BEING DRAWN PURSUANT TO THIS CERTIFICATE IS THE AMOUNT DUE AND OWING TO BENEFICIARY BEYOND ANY APPLICABLE NOTICE GRACE PERIODS APPLICABLE UNDER THE AGREEMENT[S].

– OR –

- (1) THIS LETTER OF CREDIT WILL EXPIRE IN THIRTY (30) CALENDAR DAYS OR LESS AND THE ACCOUNT PARTY HAS NOT PROVIDED ALTERNATE SECURITY AS REQUIRED PER THE TERMS OF THE AGREEMENT.

IN WITNESS WHEREOF, THE UNDERSIGNED HAS EXECUTED THIS DRAWING CERTIFICATE AS OF THE ____ DAY OF _____ 20__.

BY:

NAME:

TITLE:

**NON-RA EXPORT CAPACITY
TRANSACTION CONFIRMATION**

This Non-RA Export Capacity Transaction Confirmation (“**Confirmation**”), dated March __, 2022 (the “**Effective Date**”), is made and entered into by Geysers Power Company, LLC (“**Seller**”) and the Sacramento Municipal Utility District (“**Buyer**”) pursuant to the Western Systems Power Pool Agreement (Effective Version: July 28, 2020) together with any and all exhibits, schedules or supplements thereto or incorporated therein by reference, but no further modification unless agreed by the Parties (the “**WSPP Agreement**”), and is subject to the terms and conditions of the WSPP Agreement, except as modified by this Confirmation. Seller and Purchaser are sometimes each referred to herein as a “**Party**” and collectively as the “**Parties**”. Terms used but not defined herein shall have the meanings ascribed to them in the WSPP Agreement. In the event of any inconsistency between any of the terms herein and in the WSPP Agreement, the terms of this Confirmation shall control. This Confirmation and the WSPP Agreement are referred to collectively as the “**Agreement**”.

NOW, THEREFORE, the Parties agree as follows:

Seller:	Geysers Power Company, LLC:
Buyer:	Sacramento Municipal Utility District
Product:	Capacity from the Project (as defined below) to support Self-Schedules for the export from the CAISO Balancing Area Authority to an external Balancing Area Authority of energy purchased by Buyer from Seller. Buyer intends to use capacity from the Project identified by Seller as provided below (the “ Non-Resource Adequacy Capacity ” or “ Non-RA Capacity ”), to support the export of Self-Scheduled energy as a high priority non-recallable export, which will be defined as the priority established for “Self-Schedules of exports at Scheduling Points explicitly sourced by Non-Resource Adequacy Capacity” pursuant to Section 31.4 of the CAISO Tariff or for “Price Taker (PT) exports” pursuant to Section 2.5.5.1 of the CAISO Market Operations Business Practice Manual. The Non-Resource Adequacy Capacity in support of exports from the CAISO Balancing Area Authority to an external Balancing Area Authority is sometimes referred to as a “ Supporting Resource .” Buyer’s rights hereunder to the Product do not include any rights to the electrical output of the Units or the Alternate Capacity, and no Energy or Ancillary Services associated with any Unit is required to be made available to Buyer pursuant to this Confirmation.
Project:	Subject to the provisions in the section titled “Alternate Capacity”, the Product will be provided from one or more geothermal power plants (“ Units ”) owned or controlled by Seller in Lake and Sonoma Counties, California. The Units as of the Effective Date are listed on Exhibit A attached hereto. However, due to the portfolio nature of the Geysers

	<p>geothermal facility, Buyer acknowledges that Seller is making sales and deliveries from the Project to other purchasers. Following the Effective Date, Seller may add or remove generating facilities and/or Designated Alternate Capacity Units to or from Exhibit A with prior written notice to Buyer, and any added generating facility(ies) will thereafter be considered Units for all purposes under this Confirmation; provided that, to the extent that addition of the generating facility(ies) was not approved by the CEC prior to delivery, the delivery of Product from the added generating facility(ies) is conditioned on the CEC making a final decision pursuant to the California Code of Regulations, Title 20, Section 2910 that the covered procurement complies with EPS, and in the event the CEC makes a final decision that the added generating facility(ies) does not comply with the EPS, the change to Exhibit A shall be void and all pending Product deliveries from such added generating facility(ies) shall be terminated no later than the effective date of the CEC's decision. The Unit or Units from which the Product is delivered and the amount of Product delivered from each Unit may change from time to time during the Delivery Term, and the capacity of a Unit may be allocated wholly or partially to the delivery of the Product.</p>
Contract Quantity:	100 MW, measured on the same basis as NQC. Any difference between the actual capacity of a Unit and such Unit's NQC due to operating conditions will be treated as an Unexcused Outage if Seller does not provide Alternate Capacity.
Contract Price:	
Delivery Term:	January 1, 2023 through December 31, 2032
Monthly Payment:	<p>Buyer will make a monthly payment to Seller calculated as follows:</p> $\text{Monthly Payment} = ([\text{Contract Quantity} - \text{Planned Outage Quantity} - \text{Designated Unexcused Outage Quantity}] \times \text{Contract Price} \times \text{Monthly Shape Factor}) + \text{NPD Amount} - \text{Damage Payment Amount}$ <p>where</p> <p>“Planned Outage Quantity” means the amount of Product not provided due to a Planned Outage to the extent that Seller does not replace such Product with Alternate Capacity. For any month, the Planned Outage Quantity will be equal to the Contract Quantity times a fraction, the numerator of which is the number of hours of Planned Outage in such month and the denominator of which is the total number of hours in such month. For purposes of the foregoing calculation, if the amount of Product is only partially reduced as a result of a Planned Outage, such reduction will be treated as a portion</p>

	<p>of an hour of Planned Outage equal to the pro rata portion of the Product that was not provided.</p> <p>“Designated Unexcused Outage Quantity” means the amount of Product not provided due to a Designated Unexcused Outage to the extent that Seller does not replace such Product with Alternate Capacity. For any month, the Designated Unexcused Outage Quantity will be equal to the Contract Quantity times a fraction, the numerator of which is the number of hours of Designated Unexcused Outage in such month and the denominator of which is the total number of hours in such month. For purposes of the foregoing calculation, if the amount of Product is only partially reduced as a result of a Designated Unexcused Outage, such reduction will be treated as a portion of an hour of Designated Unexcused Outage equal to the pro rata portion of the Product that was not provided.</p> <p>“Monthly Shape Factor” means the applicable percentage for the month set forth on Exhibit B.</p> <p>“NPD Amount” means the total negative price differential amount, if any, for the month, as provided in the section titled “Delivery of Product”.</p> <p>“Damage Payment Amount” means the amount of damages, if any, payable by Seller as provided in the section titled “Damages for Unexcused Failure to Provide Product”.</p>
Delivery of Product:	<p>Seller will notify Buyer at least 30 days before the beginning of each calendar month during the Delivery Term of the Unit or Units from which the Product will be provided for that month, the amount of Product (in MW) that will be provided from each such Unit, and the CAISO Resource ID number(s) for such Unit(s). Seller may revise the Units and quantities of Product from each Unit designated in such notice (or designate Alternate Capacity as provided below, as applicable) from time to time until two (2) hours before the scheduling deadline for the submission of Bids into the Day Ahead Market or such later time (including real time) to the extent allowed by the CAISO. Buyer and Seller will cooperate and take reasonable actions to enable substitution of other Units or Alternate Capacity after the foregoing deadline to the extent allowed by the CAISO.</p> <p>Seller will be deemed to have delivered the Product in a given hour to the extent it has done the following:</p>

	<p>(1) Seller has designated an amount of capacity equal to the Contract Quantity from one or more Units and/or from Alternate Capacity that satisfy the following requirements:</p> <ul style="list-style-type: none"> (a) The Units or Alternate Capacity designated by Seller are identified in their respective Master Files as eligible for sale to an out-of-balancing authority area Load Serving Entity; (b) No CAISO Load Serving Entity has a right to the designated capacity; (c) The capacity is capable of supporting energy exports during the entire hour; and (d) The capacity is deliverable and has Full Capacity Deliverability Status as identified on the CAISO's Net Qualifying Capacity (NQC) list. <p>(2) Seller offers the designated capacity in the Day-Ahead Residual Unit Commitment Market ("RUC Market") to support the Contract Quantity; provided that, not more than ten (10) times in any contract year (or as otherwise agreed by Buyer and Seller), Buyer may, by notice to Seller no later than 0500 Pacific time on the applicable WECC Pre-Schedule Day, direct Seller not to offer any of the designated capacity into the RUC Market on a given day and instead to offer all (but not less than all) of the designated capacity in the Real Time Market (RTM) on that day. Bids into the RUC Market shall be at a price of zero dollars (\$0.00) per MW.</p> <p>(3) Seller has given Buyer timely notice of the Units or Alternate Capacity from which the Product will be provided and the information necessary for Buyer to schedule energy exports supported by such Units or Alternate Capacity as a Supporting Resource.</p> <p>(4) The designated capacity has not been reduced as the result of forced outages or derates of the designated Units and/or Alternate Capacity that has been allocated to Buyer, it being understood that any reduction will reduce the amount of Product delivered.</p> <p>For those days that Buyer directs Seller to offer all of the designated capacity in the RTM instead of the RUC Market as provided in clause (2), Buyer will hold Seller harmless from any negative price differential between the prices in the Day Ahead Market and RTM at the PNode(s) for the designated capacity. The price differential (defined as the Day Ahead Market price minus the RTM price) for the Contract Quantity will be calculated on an hourly basis for all hours in</p>
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	an applicable day, and the cumulative differential amount will be payable by Buyer to Seller monthly as provided below, but the monthly amount will not be less than zero (i.e. Seller will not be required to make a payment to Buyer.
Scheduling Coordinator; Other CAISO Revenues:	Seller will be the Scheduling Coordinator for the Units and will take such actions as may be reasonably necessary to enable Seller to perform its obligations under this Confirmation. Except as otherwise expressly provided herein or in another agreement between Buyer and Seller, Seller shall be entitled to retain any revenues it may receive from the CAISO or a third party from sales of other products from the Units, including energy, ancillary services and unit contingent call rights to provide energy, so long as such sales to not interfere with or confer any right to any Product sold hereunder.
Adjustments to Contract Quantity:	If and to the extent the Units are not available to provide the full amount of the Contract Quantity in any given hour, Seller may elect either not to provide the unavailable portion of the Contract Quantity or to provide Alternate Capacity to replace the unavailable portion of the Contract Quantity. Except as provided section titled “Excused Outages and Other Delivery Excuses”, if Seller elects not to provide Alternate Capacity to replace unavailable Contract Quantity, Seller will be liable for damages as provided below.
Alternate Capacity:	If Seller is unable to provide the full amount of the Contract Quantity from the Units initially designated to provide the Product, Seller may supply capacity from other Units, from a Designated Alternate Capacity Unit, or from other generating resources in the CAISO Balancing Authority Area that satisfy the requirements for Non-RA Capacity set forth above in the section titled “Delivery of Product” (“ Alternate Capacity ”); provided, however, that such Alternate Capacity provided from other generating resources in the CAISO Balancing Authority Area that are not Units or Designated Alternate Capacity Units shall not exceed 15% of the forecasted Product to be delivered over the entire Delivery Term; provided, further, commencing on August 1, 2029, and on each August 1 thereafter during the Delivery Term, Buyer may inform Seller that Buyer does not want to continue to allow Seller to provide Alternate Capacity from resources other than the Units from and after January 1, 2030, or the January 1 following the date of the notice, as applicable, through the remainder of the Delivery Term, in which case Seller shall not designate a resource that is not a Unit as Alternate Capacity after such date; provided, further, that if Buyer’s board of directors adopts a policy (or revises an existing policy) that requires Buyer not to purchase energy or capacity from resources that emit greenhouse gases earlier than January 1, 2030, Buyer shall have the foregoing option as

	of the date five (5) months before the effective date of such new or revised policy. For the avoidance of doubt, Designated Alternate Capacity Units shall only be used as Alternate Capacity.
Planned Outages:	Planned Outage shall be scheduled in accordance with applicable CAISO procedures during the Non-Summer Months. Planned Outages will be limited to 45 days per calendar year. Planned Outages where the affected Contract Quantity is replaced by Alternate Capacity shall not be counted against the 45 days per year allowance for Planned Outages. Planned Outages affecting less than all of the Contract Quantity will be considered a Planned Outage for a part of a day corresponding to the pro rata amount of the affected Contract Quantity.
Excused Outages and Other Excused Events:	<p>Seller shall be excused from providing the Product or Alternate Capacity to the extent such failure is due to (i) an Excused Outage, (ii) Buyer's failure to perform any of its obligations hereunder, or (iii) any curtailment or reduction in priority of Buyer's export of energy outside of the CAISO Balancing Authority Area, including transmission outages and system emergencies, that is not the result of a failure of performance by Seller hereunder.</p> <p>If Buyer notifies Seller that Seller may not provide Alternate Capacity from resources other than the Units as provided above in the section titled "Alternate Capacity", Seller shall thereafter be excused from providing Product or Alternate Capacity to the extent the Units are not available to provide the full Contract Quantity except as the result of a Designated Unexcused Outage.</p> <p>Each of the foregoing reasons for Seller being excused from providing the Product or Alternate Capacity is referred to herein as an "Excused Event". Buyer accepts the risk of Excused Events and agrees that there shall be no reduction in the monthly payment as a result of any failure to provide Product or Alternate Capacity due to an Excused Event.</p>
Damages for Unexcused Failure To Provide Product:	If in any month Seller fails to deliver at least 94.5% of the Contract Quantity from the Units or Alternate Capacity on average, calculated over all of the Assessment Hours in such month for reasons that are not Excused Events, Seller shall be subject to damages equal to the penalties that would be payable under the CAISO Tariff for failure to deliver the same amount of Resource Adequacy Capacity. Buyer and Seller acknowledge and agree that, as of the Effective Date, those penalties are RAIM penalties equal to 60% of the CPM Soft-Cap Price (as provided in Section 40.9.6.1(b) of the CAISO Tariff), but those penalties may change as provided in the preceding sentence. Damages (if any) will be calculated on an hourly basis, but paid

	<p>monthly as provided in the section title “Monthly Payment”. Upon Buyer’s reasonable request, Seller will provide access to any records, including outage reporting or settlement data from the CAISO necessary to verify the invoice.</p>
Review of Unit Availability:	<p>After the first year of the Delivery Term, and thereafter as reasonably requested by Buyer, the Parties will meet and confer regarding the availability of the Unit(s). If the availability of the Unit(s) persistently is materially less than 100 MW, the Parties will discuss in good faith opportunities to improve such availability and, if they agree (each in its sole discretion) to make any appropriate amendments to this Transaction, including, but not limited to, adjustments to the Contract Quantity. However, unless and until the Parties enter into any such amendments, this Transaction shall continue in full force and effect.</p>
Change In Law:	<p>In the event of any change in law or regulations, including but not limited to the CAISO Tariff, Software Infrastructure Business Rules (SIBR), and/or Business Practice Manuals, that materially affects the requirements for capacity that supports energy exports from the CAISO Balancing Authority Area to an external Balancing Authority Area (i.e., a Supporting Resource) or that materially changes the rights or obligations of a Party or the costs, benefits or burdens of performance by a Party under this Confirmation, then, at the request of the affected Party, the Parties will meet and negotiate in good faith to make such revisions to this Transaction as may be necessary to restore the costs, benefits and burdens of performance by each Party to those existing as of the Effective Date. If the Parties are unable to agree on such amendments after 90 days, this Transaction will continue in force, but Buyer may, at its option, resell the Product as Resource Adequacy Capacity, and Seller will cooperate with Buyer in effectuating such resale.</p> <p>Without limiting the foregoing, if during the Delivery Term the CAISO or the CPUC either replaces NQC as the value utilized to measure the qualifying capacity of a Unit with a successor value such as unforced capacity (“UCAP”), or utilizes such successor value as a supplemental means of measuring the qualifying capacity of a Unit together with NQC, then, at Seller’s request, the Parties shall negotiate an amendment to this Confirmation so that, from and after the effective date of such replacement or supplement, the amount of Product to be provided by Seller to Buyer is no less than Buyer’s pro rata share of the total qualifying capacity of the Units after such replacement or supplement (based on the ratio of the Contract Quantity to the total qualifying capacity of the Units before such replacement); provided that Seller may, at its option, agree to provide Product in excess of such amount up to the Contract Quantity.</p>

Credit Support:	<p>Seller and Buyer are entering into the RPS Agreement concurrently with the execution of this Confirmation. The security posted by Seller under the RPS Agreement shall secure its obligations under both this Confirmation and the RPS Agreement; provided that Buyer may only draw on such security pursuant to this Confirmation to recover damages payable under this Confirmation. The provisions of the RPS Agreement shall govern the posting, maintenance and release of this security. However, if the RPS Agreement is terminated for any reason, but this Confirmation continues in force, the Parties will amend this Confirmation within thirty (30) days after such termination to include the relevant portions of the RPS Agreement relating to posting, maintenance, reduction and release of the security (with such changes as may be necessary to reflect the differences between the two confirmations) and <u>Schedule 1</u>, except that the amounts on <u>Schedule 1</u> to the RPS Agreement will be reduced to reflect the proportionate reduction in Buyer's overall exposure as a result of the termination of the RPS Agreement. Once Seller has achieved an Investment Grade Rating, Seller shall no longer be required to post security under this Confirmation or the RPS Agreement, and Buyer shall return any cash or letters of credit held as security as provided in the RPS Agreement.</p> <p>As long as Buyer maintains an Investment Grade Rating, Buyer will not be required to provide security for the performance of its obligations hereunder and under the RPS Agreement. If Buyer ceases to maintain an Investment Grade Rating, Buyer will post and maintain security for its obligations hereunder and under the RPS Agreement as provided in the RPS Agreement; provided that Seller may only draw on such security pursuant to this Confirmation to recover damages payable under this Confirmation. If Buyer subsequently regains an Investment Grade Rating, shall not be required to post security under this Confirmation or the RPS Agreement, and Seller shall return any cash or letters of credit held as security as provided in the RPS Agreement.</p>
Early Termination:	<p>The Parties have entered into a separate agreement for the purchase and sale of renewable energy from the Units, which is dated concurrently with the Effective Date (the "RPS Agreement"). In the event the RPS Agreement is terminated for reasons other than as the result a default by a Party thereunder, either Party may also terminate this Agreement by written notice to the other Party within thirty (30) days after the termination of the RPS Agreement. Any such termination shall be "without fault", and neither Party shall be subject to damages or ongoing obligations as a result of such termination.</p>

Assignment:	<p>Notwithstanding anything in Section 14 of the WSPP Agreement to the contrary, Seller may, without the prior written consent of Buyer, transfer or assign this Confirmation and its rights and obligations hereunder to a Qualified Transferee; provided that Seller shall provide at least fifteen (15) Business Days notice to Buyer prior to any such transfer or assignment, and Seller shall not be relieved of its obligations under the Agreement prior to the effective date of such transfer or assignment and Seller's assignee having agreed in writing to assume all of Seller's obligations and liabilities under this Agreement. Upon any such assignment and the assumption in writing by the Affiliated assignee of all of Seller's obligations hereunder, Seller shall be released from any further obligation or liability under this Confirmation.</p> <p>Seller may also assign this Confirmation as collateral for any financing or refinancing of some or all of the Units. In connection with any financing or refinancing of some or all of the Units by Seller, Buyer shall in good faith work with Seller and its lender to execute a consent to collateral assignment of this Agreement substantially in the form attached hereto as Exhibit D.</p>
Limitation on Damages:	<p>THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. IF ANY PROVISION OF THIS AGREEMENT PROVIDES FOR AN EXPRESS REMEDY OR MEASURE OF DAMAGES, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF THAT PROVISION, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY FOR A BREACH OF SUCH PROVISION ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED, A PARTY'S LIABILITY FOR BREACH SHALL BE LIMITED TO DIRECT DAMAGES ONLY. EXCEPT FOR DAMAGES OWED TO UNAFFILIATED THIRD PARTIES WHICH MAY BE SUBJECT TO INDEMNIFICATION, NEITHER PARTY SHALL HAVE ANY LIABILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING LOSS OF PROFITS OR BUSINESS OPPORTUNITIES, ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIVITIES CONTEMPLATED HEREBY, WHETHER ASSERTED IN CONTRACT, TORT OR OTHERWISE AND NOTWITHSTANDING THE INADEQUACY OR CLAIMED INADEQUACY OF ANY LIMITED REMEDY.</p> <p>NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, SELLER'S TOTAL LIABILITY HEREUNDER AND UNDER THE RPS AGREEMENT SHALL NOT EXCEED THE AMOUNTS SET FORTH ON SCHEDULE 1 TO THE RPS AGREEMENT FOR THE PERIOD IN QUESTION.</p>

Emission Performance Standard	This Agreement is a “covered procurement” under the CEC’s EPS and Buyer shall make the required compliance filing with the CEC within 10 Business Days of the Effective Date. The Parties agree that this Agreement shall be void and all pending Product deliveries terminated no later than the effective date of any final decision by the CEC pursuant to the California Code of Regulations, Title 20, Section 2910 that the covered procurement fails to comply with EPS. The Parties acknowledge that the Project is a “determined to be compliant” power plant pursuant to 20 CCR §§ 2903(b)(1) or (2).
General Representations:	<p>In addition to the representations and warranties contained in Section 37 of the Master Agreement, each of Purchaser and Seller represents and warrants to the other party that, as of the Effective Date:</p> <ul style="list-style-type: none"> (a) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation; (b) it has all contractual, governmental, regulatory and legal authorizations necessary for it to legally perform its obligations under this Confirmation; (c) the execution, delivery and performance of this Confirmation are within its powers, have been duly authorized by all necessary action; (d) this Confirmation and each other document executed and delivered in accordance with this Confirmation constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any bankruptcy, insolvency, reorganization and other laws affecting creditors’ rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending; and (e) it is acting for its own account, has made its own independent decision to enter into this Confirmation and as to whether this Confirmation is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in doing so, and is capable of assessing the merits of and understanding, and understands and accepts, the terms and conditions and risks of this Confirmation.
Certain Modifications of the WSPP Agreement:	<p>The WSPP Agreement is hereby modified as follows:</p> <ul style="list-style-type: none"> (1) Section 21.1 of the WSPP Agreement is amended by deleting “other direct” in the ninth line. The Parties also agree that the waiver

	<p>on the fifth line of that section does not apply to any damages or other remedies expressly provided for in this Confirmation.</p> <p>(2) Section 21.3(a) of the WSPP Agreement is modified by (i) deleting the words “as follows” in the sixth line of the first sentence thereof and substituting the phrase “as set forth in the applicable Confirmation”, (ii) deleting subsections (1), (2) and (3) thereof, (iii) deleting the phrase “and the Contract Price of the Confirmation to which the non-performed transaction is identified, and the Contract Quantity of the non-performed transaction, shall be applied to the calculation of amounts due under Section 21.3(a)(1) through (3), as applicable” at the end of the first paragraph of subsection (5) thereof and substituting the phrase “and damages shall be calculated in accordance with the applicable Confirmations”, and (iv) deleting the balance of subsection (5) after the first two paragraphs thereof</p> <p>(3) Section 21.3(d) of the WSPP Agreement is revised by (i) changing “the full amount of damages” on the second and third lines to “the undisputed amount of damages”, and (ii) deleting the second sentence thereof.</p> <p>(4) Section 22.1 of the WSPP Agreement is modified as follows:</p> <p>(a) Subsection (d) is deleted and replaced with [intentionally omitted]”:</p> <p>(b) Subsections (f) through (j) are added as follows:</p> <p>“(f) the failure of the Defaulting Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party’s obligations to deliver or receive the quantities of Product due under this Agreement, the exclusive remedy for which is provided in Section 21.3) if such failure is not remedied within thirty (30) days after written notice;</p> <p>(g) the termination of the RPS Agreement as the result of a default by the Defaulting Party thereunder;</p> <p>(h) the failure of the Defaulting Party to pay its debts generally as they become due or the Defaulting Party’s admission in a writing that is unable to generally pay its debts as they become due;</p> <p>(i) the institution, by the Defaulting Party, of a general assignment for the benefit of its creditors; or</p>
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	<p>(j) the application for, consent to, or acquiescence to, by the Defaulting Party, the appointment of a receiver, custodian, trustee, liquidator, or similar official for all or a substantial portion of its assets.”</p> <p>(5) Section 22.2(b) of the WSPP Agreement is amended by (i) inserting “and is continuing” after “Event of Default occurs” in the first line of the first paragraph, (ii) deleting the second sentence in the first paragraph, and (iii) deleting the second paragraph in its entirety.</p> <p>(6) Section 22.3 of the WSPP Agreement is amended as follows:</p> <p>(a) The second sentence of Section 22.3(b) is deleted and replaced with the following: “The “Present Value Rate” shall mean an annual rate equal to the “prime rate” as published in the Wall Street Journal from to time plus 2%.”</p> <p>(b) The third sentence of Section 22.3(c) is deleted and replaced with the following: “If the Non-Defaulting Party’s aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement or a Confirmation, the Termination Payment for all such Terminated Transactions shall be zero, notwithstanding any provision in this Section or Agreement to the contrary.”</p> <p>(c) Section 22.3(e) (including all subsections) is deleted in its entirety and replaced with the following: “[intentionally omitted]”</p> <p>(d) Section 22.3(f) is deleted in its entirety and replaced with the following:</p> <p>“If the Defaulting Party disagrees with the calculation of the Termination Payment and the Parties cannot otherwise resolve their differences, and provided that Defaulting Party has paid the undisputed part of the Termination Payment to the Non-Defaulting Party and that any amounts disputed by the Defaulting Party are disputed in good faith, then the Defaulting Party may submit the calculation to dispute resolution pursuant to Section 34.”</p> <p>(7) Section 24 is amended by deleting “Utah” in the second line and replacing it with “California”.</p> <p>(8) Section 27 is deleted in its entirety and replaced with the following: “[intentionally omitted]”.</p>
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	<p>(9) The netting provisions of Section 28 of the WSPP Agreement shall apply to the transaction covered by this Confirmation as if Buyer and Seller had both executed Exhibit A to the WSPP Agreement. Both Parties intend for the netting provisions of Exhibit A to the WSPP Agreement to be effective on the first day of the Delivery Term.</p> <p>(10) Section 30.1 is amended by (a) inserting “or requested” after the word “required” in clause (4), (b) deleting “or” immediately before clause (7), and (c) adding the following at the end of the first sentence: “; or (8) to the Party’s and such Party’s affiliates’ lenders and potential lenders, investors or potential investors, counsel, accountants, advisors and agents who have a need to know such information and have agreed to keep such terms confidential”.</p> <p>(11) The second sentence of Section 31 of the WSPP Agreement is deleted.</p> <p>(12) The second and third sentences of Section 32.5 of the WSPP Agreement are deleted.</p> <p>(13) Sections 34.1 and 34.2 are deleted in their entirety and replaced with the following:</p> <p style="padding-left: 40px;">34.1 INFORMAL DISPUTE RESOLUTION</p> <p style="padding-left: 80px;">In the event of any dispute arising under this Confirmation, within ten (10) days following the receipt of a written notice from either Party identifying such dispute, the Parties shall meet, negotiate and attempt in good faith to resolve the dispute informally. If the Parties are unable to resolve a dispute arising hereunder within thirty (30) days after receipt of such notice, then each Party may seek any and all remedies available to it at law or in equity, subject to the limitations set forth in this Confirmation.</p> <p style="padding-left: 40px;">34.2 JURISDICTION; VENUE</p> <p style="padding-left: 80px;">Each Party submits to the jurisdiction of the state and federal courts located in Sacramento County, California, for any action or proceeding relating to this Confirmation or any transaction, and expressly waives any objection it may have to such jurisdiction or the convenience of such forum. Any litigation brought to enforce or interpret this Agreement shall be brought in the state or federal courts located in Sacramento County, California.</p>
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	<p>(14) The phrase “arbitration or” in the first line of Section 34.4 is deleted.</p> <p>(15) The phrase “as of the date of execution of this Confirmation,” is inserted after “to the other(s)” in the first line of Section 37.</p> <p>(16) Section 41 of the WSPP Agreement is renumbered Section 42 and the following new Section 41 entitled “Standard of Review” is inserted between Sections 40 and 42:</p> <p style="text-align: center;">41. STANDARD OF REVIEW</p> <p>The Parties agree as follows:</p> <p>41.1 Absent the agreement of all Parties to the proposed change, the standard of review for changes to any section of this Agreement (including all Transactions and/or Confirmations) specifying the rate(s) or other material economic terms and conditions agreed to by the Parties herein, whether proposed by a Party, a non-party or FERC acting <i>sua sponte</i>, shall be the “public interest” standard of review set forth in <i>United Gas Pipe Line Co. v. Mobile Gas Service Corp.</i>, 350 U.S. 332 (1956) and <i>Federal Power Commission v. Sierra Pacific Power Co.</i>, 350 U.S. 348 (1956)(the “Mobile-Sierra” doctrine) and clarified in <i>Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish</i> 554 U.S. 527 (2008) and <i>NRG Power Marketing LLC v. Maine Pub. Util. Comm’n</i>, 558 U.S. 165 (2010).</p> <p>41.2 The Parties, for themselves and their successors and assigns, (i) agree that this “public interest” standard shall apply to any proposed changes in any other documents, instruments or other agreements executed or entered into by the Parties in connection with this Agreement and (ii) hereby expressly and irrevocably waive any rights they can or may have to the application of any other standard of review, including the “just and reasonable” standard.</p>
Notices:	All notices hereunder will be in writing and will be sent to the Parties at the notice addresses set forth on Exhibit C attached hereto.
Definitions:	In addition to the defined terms in the WSPP Agreement, the following capitalized terms used in this Confirmation will have the meanings set forth below or defined elsewhere in this Confirmation. Excepted as otherwise defined herein, capitalized terms used in this Confirmation

	<p>and defined in the CAISO Tariff will have the meanings defined in the CAISO Tariff.</p> <p>“Alternate Capacity” has the meaning defined in the section titled “Alternate Capacity”.</p> <p>“Assessment Hour” means an “Availability Assessment Hour”, as defined in the CAISO Tariff, established by the CAISO pursuant to Section 40.9.3.1 of the CAISO Tariff.</p> <p>“Bid” has the meaning defined in the CAISO Tariff.</p> <p>“CAISO” means the California Independent System Operator Corporation or successor entity, or entities, with similar function(s).</p> <p>“CAISO Tariff” means the CAISO’s open access transmission tariff filed with, and approved by, the Federal Energy Regulatory Commission, as that tariff may be amended from time-to-time.</p> <p>“Day Ahead Market” has the meaning defined in the CAISO Tariff.</p> <p>“Designated Unexcused Outage” means Seller’s failure to deliver the Product due to (i) its failure to designate in the applicable Master File(s) sufficient capacity at the Project or Alternate Capacity as eligible for sale to a Load Serving Entity outside of the CAISO Balancing Authority Area, (ii) its designation of capacity as Non-RA Capacity hereunder that has also been designated on a Supply Plan as a Resource Adequacy Resource, or (iii) its failure to provide Alternate Capacity after it has notified Buyer that it would provide Alternate Capacity.</p> <p>“Effective Date” has the meaning defined in the preamble to this Confirmation.</p> <p>“Emission Performance Standard” or “EPS” means the requirements set-forth in California Code of Regulations (CCR) Title 20, Chapter 11, Article 1. Section 2900 et seq.</p> <p>“Excused Event” has the meaning defined in the section titled “Excused Outages and Other Excused Events”.</p> <p>“Excused Outage” means (i) an outage due to Uncontrollable Force, system emergencies, full or partial transmission outages (including public safety power shutoffs), actions by the CAISO or similar events or circumstances, and (ii) a Planned Outage.</p>
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	<p>“Governmental Authority” means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.</p> <p>“Investment Grade Rating” means a rating of BBB- or better from S&P or a rating of Baa3 or better from Moody’s.</p> <p>“Load Serving Entity” has the meaning defined in the CAISO Tariff.</p> <p>“Master File” has the meaning defined in the CAISO Tariff.</p> <p>“Moody’s” means Moody’s Investors Service, Inc.</p> <p>“Planned Outage” means a Maintenance Outage (as defined in the CAISO Tariff) of any of the Units and any other outage characterized by the CAISO as a “planned outage” of any of the Units.</p> <p>“Net Qualifying Capacity” or “NQC” has the meaning defined in the CAISO Tariff.</p> <p>“Non-Resource Adequacy Capacity” or “Non-RA Capacity” has the meaning defined in the section titled “Product”.</p> <p>“Qualified Transferee” means (1) an Affiliate of Seller, or (2) any person succeeding to all or substantially all of the assets of Seller (whether voluntarily or by operation of law) that either itself or its direct or indirect parent, has (x) a tangible net worth of at least \$50,000,000 or (y) a credit rating of “BB-“ or higher by S&P or “Ba3” or higher by Moody’s</p> <p>“Real Time Market” or “RTM” has the meaning defined in the CAISO Tariff.</p> <p>“Resource Adequacy Capacity” has the meaning defined in the CAISO Tariff.</p> <p>“RPS Agreement” has the meaning defined in the section titled “Early Termination”.</p> <p>“RUC Market” has the meaning defined in the section titled “Delivery of Product”.</p> <p>“S&P” means Standard & Poor’s Financial Services LLC.</p>
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	<p>“Supporting Resource” has the meaning defined in the section titled “Product”.</p> <p>“Unexcused Outage” means and outage that is not an Excused Outage.</p> <p>“Units” has the meaning defined in the section titled “Project”.</p> <p>“WECC Pre-Schedule Day” means, with respect to any day, the prescheduling day set forth in the applicable prescheduling calendar issued from time to time by the Western Electricity Coordinating Council.</p>
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EXHIBIT A

UNITS

<u>Name of Facility</u>	<u>CAISO Resource ID</u>
Aidlin Power Plant	ADLIN_1_UNITS
Sonoma Power Plant	SMUDGO_7_UNIT 1
Geysers Units 5&6	GYS5X6_7_UNITS
Geysers Units 7&8	GYS7X8_7_UNITS
Geysers Unit 11	GEYS11_7_UNIT11
Geysers Unit 12	GEYS11_7_UNIT12
Geysers Unit 13	GEYS11_7_UNIT13
Geysers Unit 14	GEYS11_7_UNIT14
Geysers Unit 16	GEYS11_7_UNIT16
Geysers Unit 17	GEYS11_7_UNIT17
Geysers Unit 18	GEYS11_7_UNIT18
Calistoga Power Plant	SANTFG_7_UNITS
Geysers Unit 20	GEYS11_7_UNIT20

EXHIBIT A

DESIGNATED ALTERNATE CAPACITY UNITS

<u>Name of Facility</u>	<u>CAISO Resource</u> <u>ID</u>
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Delta Energy Center	DELTA_2_PL1X4
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Exhibit B

MONTHLY SHAPE FACTOR

<u>Month</u>	<u>Percentage of Average Annual Price</u>
January	75.00%
February	75.00%
March	50.00%
April	41.67%
May	41.67%
June	100.00%
July	200.00%
August	200.00%
September	200.00%
October	100.00%
November	41.67%
December	75.00%

EXHIBIT C

NOTICES

1.

Dated as of [_____]

This CONSENT AND AGREEMENT, dated as of [____], 20[___] (this “Consent”), is *entered into by and among* ***[Insert name of Contracting Party]***, a [_____] [organized][formed] and existing under the laws of the State of [_____] (together with its permitted successors and assigns, “Contracting Party”), MUFG UNION BANK, N.A., in its capacity as collateral agent for the First Lien Secured Parties referred to below (together with its successors, designees and assigns in such capacity, “First Lien Collateral Agent”), and GEYSERS POWER COMPANY, LLC, a limited liability company formed and existing under the laws of the State of Delaware (together with its permitted successors and assigns, “Assignor”).

RECITALS

A. Assignor owns the following geothermal electric generating facilities located in the Geysers area of Northern California (Sonoma and Lake Counties) (collectively, the “Projects”):

The Aidlin project, an approximately 18 megawatt geothermal facility located in Sonoma County, CA.

The Sonoma project, an approximately 53 megawatt geothermal facility located in Sonoma County, CA.

The two-unit McCabe project, an approximately 84 megawatt geothermal facility located in Sonoma County, CA.

The two-unit Ridge Line project, an approximately 76 megawatt geothermal facility located in Sonoma County, CA.

The Eagle Rock project, an approximately 68 megawatt geothermal facility located in Sonoma County, CA.

The Cobb Creek project, an approximately 51 megawatt geothermal facility located in Sonoma County, CA.

The Big Geysers project, an approximately 61 megawatt geothermal facility located in Lake County, CA.

The Sulphur Springs project, an approximately 47 megawatt geothermal facility located in Sonoma County, CA.

The Quicksilver project, an approximately 53 megawatt geothermal facility located in Lake County, CA.

The Lake View project, an approximately 54 megawatt geothermal facility located in Sonoma County, CA.

The Socrates project, an approximately 50 megawatt geothermal facility located in Sonoma County, CA.

The two-unit Calistoga project, an approximately 69 megawatt geothermal facility located in Lake County, CA.

The Grant project, an approximately 41 megawatt geothermal facility located in Sonoma County, CA.

B. In order to finance the operation and maintenance of the Projects, Assignor has entered into that certain Credit Agreement, dated as of June 9, 2020 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Credit Agreement”), with GEYSERS INTERMEDIATE HOLDINGS LLC, a Delaware limited liability company, as Holdings (“Holdings”), GEYSERS COMPANY, LLC, a Delaware limited liability company (“Geysers Company”), WILD HORSE GEOTHERMAL, LLC, a Delaware limited liability company (“Wild Horse”) and CALISTOGA HOLDINGS, LLC, a Delaware limited liability company (“Calistoga,” and, together with Holdings, Geysers Company and Wild Horse, each a “Guarantor” and together, the “Guarantors”), MUFG BANK, LTD., as administrative agent for the Lenders, MUFG UNION BANK, N.A., as collateral agent for the First Lien Secured Parties, and the financial institutions from time to time parties thereto in such other capacities as described therein (collectively, the “Lenders”).

C. Contracting Party and Assignor have entered into that certain [*Insert description of relevant Major Project Contract(s)*], dated as of [_____] [____], [_____] (as amended, amended and restated, supplemented or otherwise modified from time to time in accordance with the terms thereof and hereof, the “Assigned Agreement”).

D. As security for Assignor’s obligations under the Credit Agreement and related financing documents with respect to the Loans and related obligations, Assignor has granted, pursuant to a security agreement executed by Assignor and First Lien Collateral Agent (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”), to the First Lien Collateral Agent, for the benefit of the First Lien Secured Parties, a first priority lien on all of Assignor’s right, title and interest in the Projects and other rights and interests relating thereto, whenever arising, including, without limitation, the Assigned Agreement and all of Assignor’s right, title and interest under (but not any of Assignor’s obligations, liabilities or duties with respect thereto) the Assigned Agreement;

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and intending to be legally bound, the parties hereto hereby agree, notwithstanding anything in the Assigned Agreement to the contrary, as follows:

1. Assignment and Agreement.

1.1 Consent to Assignment. Contracting Party (a) is hereby notified and acknowledges that the Lenders have entered into the Credit Agreement and made the extensions of credit contemplated thereby in reliance upon the execution and delivery by Contracting Party of the Assigned Agreement and this Consent, (b) consents to the collateral assignment under the Security Agreement of all of Assignor’s right, title and interest in, to and under the Assigned Agreement, including, without limitation, all of Assignor’s rights to receive payment and all payments due and to become due to Assignor under or with respect to the Assigned Agreement (collectively, the “Assigned Interests”) and (c) acknowledges the right of First Lien Collateral Agent or a Subsequent Owner (as defined below), in the exercise of First Lien Collateral Agent’s rights and remedies pursuant to the Security Agreement, upon written notice to Contracting Party, to make all demands, give all notices, take all actions and exercise all rights of Assignor under the Assigned Agreement.

1.2 Subsequent Owner.

(a) Contracting Party agrees that, if First Lien Collateral Agent notifies Contracting Party in writing that, pursuant to the Security Agreement, it has assigned, foreclosed or sold the Assigned Interests or any portion thereof, then (i) First Lien Collateral Agent or its successor, assignee and/or designee, or any purchaser of the Assigned Interests (a “Subsequent Owner”) shall be substituted for Assignor under the Assigned Agreement and (ii) Contracting Party shall (1) recognize First Lien Collateral Agent or the Subsequent Owner, as the case may be, as its counterparty under the Assigned Agreement and (2) continue to perform its obligations under the Assigned Agreement in favor of First Lien Collateral Agent or the Subsequent Owner, as the case may be; provided that First Lien Collateral Agent or such Subsequent Owner, as the case may be, has assumed in writing all of Assignor’s rights and obligations (including, without limitation, the obligation to cure any then existing payment and performance defaults, but excluding any obligation to cure any then existing performance defaults which by their nature are incapable of being cured) under the Assigned Agreement.

(b) ***[Insert the following only if warranties are provided by Contracting Party under the relevant Assigned Agreement:*** Without limiting anything herein, the warranties provided by Contracting Party under the Assigned Agreement shall continue in full force and effect (until the expiration of the applicable warranty periods set forth in the Assigned Agreement) in the event that First Lien Collateral Agent or a Subsequent Owner succeeds to Assignor’s right, title and interest in the Assigned Agreement.]

1.3 Right to Cure. If Assignor defaults in the performance of any of its obligations under the Assigned Agreement, or upon the occurrence or non-occurrence of any event or condition under the Assigned Agreement which would immediately or with the passage of any applicable grace period or the giving of notice, or both, enable Contracting Party to terminate or suspend its performance under the Assigned Agreement (each hereinafter a “default”), Contracting Party shall not terminate or suspend its performance under the Assigned Agreement until it first gives written notice of such default to First Lien Collateral Agent and affords First Lien Collateral Agent a period of at least 15 days (or if such default is a nonmonetary default, such longer period (not to exceed 60 days) as may be required to cure such default) from receipt of such notice to cure such default; provided, however, that (a) if possession of the Projects is necessary to cure such nonmonetary default and First Lien Collateral Agent has commenced foreclosure proceedings, First Lien Collateral Agent shall be allowed a reasonable time to complete such proceedings, and (b) if First Lien Collateral Agent is prohibited from curing any such nonmonetary default by any process, stay or injunction issued by any governmental authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Assignor, then the time periods specified herein for curing a default shall be extended for the period of such prohibition.

1.4 No Amendments.

(a) [reserved]

(b) Except for the Buyer Limited Assignment Right under section (p) of the Additional Terms of the Assigned Agreement, Contracting Party agrees that it shall not, without the prior written consent of First Lien Collateral Agent, which consent shall not be unreasonably withheld, (i) sell, assign or otherwise transfer any of its

rights under the Assigned Agreement, (ii) terminate, cancel or suspend its performance under the Assigned Agreement (unless it has given First Lien Collateral Agent notice and an opportunity to cure in accordance with Section 1.3 hereof), (iii) consent to any assignment or other transfer by Assignor of its rights under the Assigned Agreement, or (iv) consent to any voluntary termination, cancellation or suspension of performance by Assignor under the Assigned Agreement.

1.5 Replacement Agreements. In the event the Assigned Agreement is rejected or terminated as a result of any bankruptcy, insolvency, reorganization or similar proceeding affecting Assignor, Contracting Party shall, at the option of First Lien Collateral Agent exercised within 30 days after such rejection or termination, enter into a new agreement with First Lien Collateral Agent having identical terms as the Assigned Agreement (subject to any conforming changes necessitated by the substitution of parties and other changes as the parties may mutually agree), provided that (i) the term under such new agreement shall be no longer than the remaining balance of the term specified in the Assigned Agreement, and (ii) upon execution of such new agreement, First Lien Collateral Agent cures any outstanding payment and performance defaults under the Assigned Agreement, excluding any performance defaults which by their nature are incapable of being cured.

1.6 Limitations on Liability. Unless and until First Lien Collateral Agent has assumed Assignor's rights and obligations under the Assigned Agreement or entered into a new agreement, Contracting Party acknowledges and agrees that First Lien Collateral Agent shall not have any liability or obligation to Contracting Party under the Assigned Agreement as a result of this Consent, the Security Agreement or otherwise, nor shall First Lien Collateral Agent be obligated or required to (a) perform any of Assignor's obligations under the Assigned Agreement, except during any period in which First Lien Collateral Agent has assumed Assignor's rights and obligations under the Assigned Agreement pursuant to Section 1.2[(a)] above, or (b) take any action to collect or enforce any claim for payment assigned under the Security Agreement. If First Lien Collateral Agent has assumed Assignor's rights and obligations under the Assigned Agreement pursuant to Section 1.2[(a)] above or has entered into a new agreement pursuant to Section 1.5 above, First Lien Collateral Agent shall be subject to liability and obligations to Contracting Party under the Assigned Agreement or such new agreement for the period that it is party to the Assigned Agreement or such new agreement.

1.7 Delivery of Notices. Contracting Party shall deliver to First Lien Collateral Agent, concurrently with the delivery thereof to Assignor, a copy of each notice, request or demand given by Contracting Party to Assignor pursuant to the Assigned Agreement relating to (a) a default by Assignor under the Assigned Agreement, and (b) any matter that would require the consent of First Lien Collateral Agent pursuant to Section 1.4 above.

1.8 Transfer. First Lien Collateral Agent shall have the right to assign all of its interest in the Assigned Agreement or a new agreement entered into pursuant to the terms of this Consent; provided that such transferee assumes in writing the obligations of Assignor or First Lien Collateral Agent, as applicable, under the Assigned Agreement or such new agreement. Upon such assignment, First Lien Collateral Agent shall be released from any further liability under the Assigned Agreement or such new agreement to the extent of the interest assigned.

1.9 Refinancing. [Contracting Party hereby acknowledges that Assignor may, from time to time during the term of the Assigned Agreement, refinance the indebtedness incurred under the Credit Agreement pursuant to another bank financing, an institutional

financing, a capital markets financing, a lease financing or any other combination thereof or other form of financing. In connection with any such refinancing, Contracting Party hereby consents to any collateral assignment or other assignment of the Assigned Agreement in connection therewith and agrees that the terms and provisions of this Consent shall apply with respect to such assignment and shall inure to the benefit of the parties providing such refinancing. In furtherance of the foregoing, Contracting Party agrees that (i)(1) references in this Consent to the "First Lien Collateral Agent" and the "First Lien Secured Parties" shall be deemed to be references to the applicable financing parties providing such refinancing, and (2) references in this Consent to the "Credit Agreement" and the "Security Agreement" shall be deemed to be references to the corresponding agreements entered into in connection with such refinancing, and (ii) if reasonably requested by Assignor, it shall enter into a new consent, substantially in the form of this Consent (including any material changes from this form of Consent as may be agreed by Contracting Party) in favor of the parties providing such refinancing.]¹

[Insert the following only if Contracting Party is an Affiliate of Assignor under the relevant Assigned Agreement: 1.10 No Obligations. Notwithstanding anything to the contrary herein or in the Assigned Agreement, in the event that First Lien Collateral Agent or its designee(s) or assignee(s) succeed to the Assignor's interest under the Assigned Agreement or foreclose on the equity interests of Assignor, First Lien Collateral Agent or its designee or assignee shall have the right, which must be exercised within thirty (30) days following such person succeeding to Assignor's interest under the Assigned Agreement or such foreclosure on the Assignor's equity interests, to terminate the Assigned Agreement upon written notice to Contracting Party and neither it nor any First Lien Secured Party nor the Assignor shall have any further obligations under the Assigned Agreement, including without limitation, obligations in respect of the payment of any fees, commissions or expenses, provided that such termination shall not affect obligations incurred prior to the date of termination for services provided.]

2. Payments under the Assigned Agreement.

2.1 Payments. Contracting Party shall pay all amounts (if any) payable by it under the Assigned Agreement in the manner and as and when required by the Assigned Agreement directly into the account specified on Exhibit A hereto, or to such other person, entity or account as shall be specified from time to time by First Lien Collateral Agent to Contracting Party in writing. Notwithstanding the foregoing, if any entity or person has become a Subsequent Owner pursuant to the terms hereof, then Contracting Party shall pay all such amounts directly to such Subsequent Owner or an account designated by Subsequent Owner.

2.2 No Offset, Etc. All payments required to be made by Contracting Party under the Assigned Agreement shall be made without any offset, recoupment, abatement, withholding, reduction or defense whatsoever, other than those allowed by the terms of the Assigned Agreement.

3. Representations and Warranties of Contracting Party. Contracting Party hereby represents and warrants, in favor of First Lien Collateral Agent, as of the date hereof, that:

(a) Contracting Party (i) is a [] duly **[formed]****[organized]** and validly existing under the laws of the State of [], (ii) is duly qualified, authorized

¹ This Section 1.9 to be included at Borrowers election and with such changes as Borrower may reasonably request.

to do business and in good standing in every jurisdiction necessary to perform its obligations under the Assigned Agreement and this Consent, and (iii) has all requisite power and authority to enter into and to perform its obligations hereunder and under the Assigned Agreement, and to carry out the terms hereof and thereof and the transactions contemplated hereby and thereby;

(b) the execution, delivery and performance by Contracting Party of this Consent and the Assigned Agreement have been duly authorized by all necessary corporate or other action on the part of Contracting Party and do not require any approvals, filings with, or consents of any entity or person which have not previously been obtained or made;

(c) each of this Consent and the Assigned Agreement is in full force and effect, has been duly executed and delivered on behalf of Contracting Party by the appropriate officers of Contracting Party, and constitutes the legal, valid and binding obligation of Contracting Party, enforceable against Contracting Party in accordance with its terms, except as the enforceability thereof may be limited by (i) bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights generally, and (ii) general equitable principles (whether considered in a proceeding in equity or at law);

(d) there is no litigation, action, suit, proceeding or investigation pending or (to the best of Contracting Party's knowledge) threatened against Contracting Party before or by any court, administrative agency, arbitrator or governmental authority, body or agency which, if adversely determined, individually or in the aggregate, (i) could adversely affect the performance by Contracting Party of its obligations hereunder or under the Assigned Agreement, or which could modify or otherwise adversely affect any required approvals, filings or consents which have previously been obtained or made, (ii) could have a material adverse effect on the condition (financial or otherwise), business or operations of Contracting Party, or (iii) questions the validity, binding effect or enforceability hereof or of the Assigned Agreement, any action taken or to be taken pursuant hereto or thereto or any of the transactions contemplated hereby or thereby;

(e) the execution, delivery and performance by Contracting Party of this Consent and the Assigned Agreement, and the consummation of the transactions contemplated hereby and thereby, will not result in any violation of, breach of or default under any term of its formation or governance documents, or of any contract or agreement to which it is a party or by which it or its property is bound, or of any license, permit, franchise, judgment, injunction, order, law, rule or regulation applicable to it, other than any such violation, breach or default which could not reasonably be expected to have a material adverse effect on Contracting Party's ability to perform its obligations under the Assigned Agreement;

(f) neither Contracting Party nor, to the best of Contracting Party's knowledge, any other party to the Assigned Agreement, is in default of any of its obligations thereunder;

(g) to the best of Contracting Party's knowledge, (i) no event of force majeure exists under, and as defined in, the Assigned Agreement, and (ii) no event or condition exists which would either immediately or with the passage of any applicable grace period or giving of notice, or both, enable either Contracting Party or Assignor to terminate or suspend its obligations under the Assigned Agreement; and

(h) the Assigned Agreement, this Consent, the Limited Assignment (a form of which is attached as Exhibit B to the Assigned Agreement⁰, if and when signed, and that certain [WSPP Export Non-Resource Adequacy Confirmation] dated [____] between Assignor and Contracting Party are the only agreements between Assignor and Contracting Party

with respect to the Project, and all of the conditions precedent to effectiveness under the Assigned Agreement have been satisfied or waived.

Each of the representations and warranties set forth in this Section 3 shall survive the execution and delivery of this Consent and the Assigned Agreement and the consummation of the transactions contemplated hereby and thereby.

4. Miscellaneous.

4.1 Notices. Any communications between the parties hereto or notices provided herein to be given may be given to the following addresses:

If to Assignor:

[Insert Address of GEYSERS POWER COMPANY, LLC]

Facsimile:

Telephone:

Attention:

If to Contracting Party:

Facsimile:

Telephone:

Attention:

If to First Lien Collateral Agent:

Facsimile:

Telephone:

Attention:

All notices or other communications required or permitted to be given hereunder shall be in writing and shall be considered as properly given (a) if delivered in person, (b) if sent by overnight delivery service (including Federal Express, UPS, DHL and other similar overnight delivery services), (c) in the event overnight delivery services are not readily available, if mailed by first class United States Mail, postage prepaid, registered or certified with return receipt requested, (d) if sent by prepaid telegram or by facsimile or (e) if sent by other electronic means (including electronic mail) confirmed by facsimile or telephone. Any party may change its address for notice hereunder by giving of 30 days' notice to the other parties in the manner set forth hereinabove.

4.2 Governing Law; Submission to Jurisdiction.

(a) THIS CONSENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE CONSTRUED IN ACCORDANCE WITH, AND BE GOVERNED BY, THE LAWS OF THE STATE OF NEW YORK (WITHOUT GIVING EFFECT TO THE PRINCIPLES THEREOF RELATING TO CONFLICTS OF LAW EXCEPT SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW).

(b) Any legal action or proceeding with respect to this Consent and any action for enforcement of any judgment in respect thereof may be brought in the courts of the State of New York or of the United States of America for the Southern District of New York, and, by execution and delivery of this Consent, Contracting Party hereby accepts for itself and in respect of its property, generally and unconditionally, the non-exclusive jurisdiction of the aforesaid courts and appellate courts from any appeal thereof. Contracting Party irrevocably consents to the service of process out of any of the aforementioned courts in any such action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to Contracting Party at its notice address provided pursuant to Section 4.1 hereof. Contracting Party hereby irrevocably waives any objection which it may now or hereafter have to the laying of venue of any of the aforesaid actions or proceedings arising out of or in connection with this Consent brought in the courts referred to above and hereby further irrevocably waives and agrees not to plead or claim in any such court that any such action or proceeding brought in any such court has been brought in an inconvenient forum. Nothing herein shall affect the right of First Lien Collateral Agent to serve process in any other manner permitted by law or to commence legal proceedings or otherwise proceed against Contracting Party in any other jurisdiction.

4.3 Counterparts. This Consent may be executed in any number of counterparts and by the different parties hereto on separate counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument. Delivery of an executed counterpart to this Consent by facsimile or “pdf” transmission shall be as effective as delivery of a manually signed original.

4.4 Headings Descriptive. The headings of the several sections and subsections of this Consent are inserted for convenience only and shall not in any way affect the meaning or construction of any provision of this Consent.

4.5 Severability. In case any provision in or obligation under this Consent shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby.

4.6 Amendment, Waiver. Neither this Consent nor any of the terms hereof may be terminated, amended, supplemented, waived or modified except by an instrument in writing signed by Contracting Party and First Lien Collateral Agent.

4.7 Successors and Assigns. This Consent shall bind and benefit Contracting Party, First Lien Collateral Agent, and their respective successors and assigns.

4.8 Third Party Beneficiaries. Contracting Party and First Lien Collateral Agent hereby acknowledge and agree that the First Lien Secured Parties are intended third party beneficiaries of this Consent.

4.9 [intentionally omitted]

4.10 Entire Agreement. This Consent and any agreement, document or instrument attached hereto or referred to herein integrate all the terms and conditions mentioned herein or incidental hereto and supersede all oral negotiations and prior writings between the parties hereto in respect of the subject matter hereof. In the event of any conflict between the terms, conditions and provisions of this Consent and any such agreement, document or instrument (including, without limitation, the Assigned Agreement), the terms, conditions and provisions of this Consent shall prevail.

4.11 Termination of Consent. This Consent shall terminate upon the earliest to occur of (a) the termination or cancellation of the Assigned Agreement in accordance with its terms and in accordance with the terms of this Consent (it being understood that this Consent shall not terminate but shall remain in effect in the circumstances described in Section 1.5 above in respect of any new agreement entered into in accordance with such Section), (b) the expiration of the term of the Assigned Agreement and (c) the termination of the Security Agreement in accordance with its terms.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto, by their officers duly authorized, intending to be legally bound, have caused this Consent and Agreement to be duly executed and delivered as of the date first above written.

GEYSERS POWER COMPANY, LLC,
a Delaware limited liability company,
as Assignor

By: _____
Name:
Title:

[Insert Name of Contracting Party],
a [_____] ,
as Contracting Party

By: _____
Name:
Title:

Accepted and Agreed to:

MUFG UNION BANK, N.A.,
solely in its capacity as First Lien Collateral Agent

By: _____
Name:
Title:

By: _____
Name:
Title:

**CALIFORNIA ENERGY COMMISSION
EMISSION PERFORMANCE STANDARD COMPLIANCE FILING**

California Energy Commission
EPS Compliance
1516 Ninth Street
Sacramento, CA 95814-512
Attention: Compliance Filing

EPS@energy.state.ca.us

This is to inform you that the Sacramento Municipal Utility District (SMUD) entered into a long-term contract for renewable energy (“the Renewable Energy Contract”) and a long-term contract for capacity (the “Capacity Contract”) on March ____, 2022 (hereinafter referred to collectively as “Power Purchase Agreements”). The information concerning these Power Purchase Agreements follows. The information is the same for both agreements except as expressly noted below:

Name of Counterparty: Geysers Power Company, LLC

Name of Facility:

Renewable Energy Contract and Capacity Contract facilities:

Table 1	
Name of Facility	CEC RPS ID
Aidlin Power Plant	60115A
Sonoma Power Plant	60010A
Geysers Units 5&6	60002A
Geysers Units 7&8	60003A
Geysers Unit 11	60025A
Geysers Unit 12	60004A
Geysers Unit 13	60005A
Geysers Unit 14	60026A
Geysers Unit 16	60006A
Geysers Unit 17	60007A
Geysers Unit 18	60008A
Calistoga Power Plant	60117A
Geysers Unit 20	60009A

**CALIFORNIA ENERGY COMMISSION
EMISSION PERFORMANCE STANDARD COMPLIANCE FILING**

Capacity Contract only: In addition to the resources, above, the Facility below may be used to provide Alternate Capacity only, under limited circumstances, as described more fully herein:

Table 2				
Name of Facility	CAISO Resource ID	2020 Emissions Factors		
		mtons	Net mwh	Lbs/mwh
Delta Energy Center	DELTA_2_PL1X4	1,497,819	3,860,249	855

Location of Facility: Geothermal (Renewable Energy and Capacity Contracts): Lake County and Sonoma County. Natural Gas (Capacity Contract only): Contra Costa County

Technology/Fuel: Geothermal (Renewable Energy and Capacity Contracts); Natural Gas (Capacity Contract only)

Nameplate Capacity of Facility: Total of 13 geothermal generating units with a portfolio nameplate capacity of 725MW. Additionally, under the Capacity Contract, 880 MW natural gas, combined cycle co-generation facility.

Product Description: Generation portfolio, Baseload

Substitute energy allowed: No substitute energy/product allowed under the Renewable Energy Contract; substitute capacity/product allowed with the Capacity Contract under certain circumstances (see explanation below)

Delivery Start Date-Delivery End Date: January 1, 2023 – December 31, 2032.

Further description of technology, if necessary:

None

Further description of facility output profile, if necessary:

None

Description of contract terms related to the provision of substitute energy, if necessary:

Under the Renewable Energy Contract, substitute energy/product is not allowed unless the contract is amended and the CEC approves a subsequent Emission Performance Standard filing for the new facility(ies).

Under the Capacity Contract, substitute capacity/product is not allowed unless the specified renewable geothermal units identified in Table 1 are unavailable due to a forced outage, scheduled maintenance or other temporary unavailability for operational or efficiency reasons. Under such circumstances, the Seller may provide substitute capacity/product (referred to in the contract as Alternate Capacity) from:

CALIFORNIA ENERGY COMMISSION
EMISSION PERFORMANCE STANDARD COMPLIANCE FILING

(1) the Delta Energy Center (Table 2, above), a specified, EPS Compliant Source, consistent with Title 20, California Code of Regulations, Section 2906(b)(1); or

(2) unspecified sources, but in an amount not to exceed 15% of the forecasted capacity/product to be delivered over the entire term of the contract, and only when the specified units (identified in Table 1, above) are unavailable due to a forced outage, scheduled maintenance or other temporary unavailability for operational or efficiency reasons, consistent with Title 20, California Code of Regulations, Section 2906(b)(2). No other substitute capacity/product is allowed under the Capacity Contract unless the contract is amended and the CEC approves a subsequent Emission Performance Standard filing for the new facility(ies).

Description of other relevant contract terms:

SMUD has contracted for 100 MW of energy, environmental attributes (including renewable energy credits), and resource adequacy capacity from the portfolio of facilities.

CALIFORNIA ENERGY COMMISSION
EMISSION PERFORMANCE STANDARD COMPLIANCE FILING
COMPLIANCE FILING ATTESTATION

I, the official named below, certify under penalty of perjury, the following:

1. I am an agent of the Sacramento Municipal Utility District (SMUD) authorized by its governing board to sign this attestation on its behalf;
2. The SMUD Board of Directors has reviewed and approved in a public meeting both the covered procurement and the compliance filing described above;
3. Based on the SMUD Board of Director's knowledge, information, and belief, the compliance filing does not contain a material misstatement or omission of fact;
4. Based on the SMUD Board of Director's knowledge, information, or belief, the covered procurement complies with Title 20, Division 2, Chapter 11, Article 1 of the California Code of Regulations; and
5. The covered procurement contains contractual terms or conditions specifying that the contract or commitment is void and all energy/product deliveries shall be terminated no later than the effective date of any Commission decision pursuant to Title 20, California Code of Regulations, section 2910, that the covered procurement fails to comply with Title 20, Division 2, Chapter 11, Article 1, of the California Code of Regulations.

Sacramento Municipal Utility District

By: _____
Paul Lau, CEO & General Manager

Date: March __, 2022

SSS No.
CZCO 22-006

BOARD AGENDA ITEM STAFFING SUMMARY SHEET

Committee Meeting & Date
ERCS – March 16, 2022
Board Meeting Date
n/a

TO				TO			
1.	Lora Anguay			6.	Gary King		
2.	Brandy Bolden			7.	Scott Martin		
3.	Frankie McDermott			8.			
4.	Steve Clemons			9.	Legal		
5.	Jennifer Davidson			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)		DEPARTMENT		MAIL STOP		EXT.	DATE SENT
Joyce Hribar		Zero Carbon Energy Solutions		EA405		5055	2/25/2022
NARRATIVE:							
<p>Requested Action: Provide an informational presentation and executive summary report on the 2030 Zero Carbon Plan Progress Update: 2021 accomplishments and 2022 priorities.</p> <p>Summary: Staff will present the first of 2 presentations and executive summary reports this year (March and September) of the 2030 Zero Carbon Plan Progress Update. Topics will include the 2021 accomplishments and 2022 priorities in the following areas:</p> <ul style="list-style-type: none">Natural Gas Generation Repurposing:<ul style="list-style-type: none">Reliability Study FindingsGrid Scale Technologies Research ResultsProven Clean Technologies:<ul style="list-style-type: none">Renewable Projects UpdateNew Technology & Business Models:<ul style="list-style-type: none">Projects & Programs UpdateMaximizing Community Benefits:<ul style="list-style-type: none">Communications, Marketing, & OutreachCommunity ImpactFinancial:<ul style="list-style-type: none">Financial Highlights, Enterprise Prioritization, Operational ExcellencePartnerships & Grants <p>Board Policy: Strategic Direction SD-9, Resource Planning; Strategic Direction SD-10, Innovation (Number & Title)</p> <p>Benefits: Discuss and receive input on the 2030 Zero Carbon Plan Progress Update: 2021 accomplishments and 2022 priorities</p> <p>Cost/Budgeted: N/A</p> <p>Alternatives: N/A – informational presentation</p> <p>Affected Parties: SMUD leaders, employees, and customers</p> <p>Coordination: All SMUD Business areas</p> <p>Presenter: Lora Anguay, Chief Zero Carbon Officer Mark Willis, Director, Transmission Planning and Operations Joyce Hribar, Manager, Operational Project Manager Office Jon Olson, Director, Energy Trading & Contracts Ed Hamzawi, Director, Advanced Energy Solutions Tom Jas, Manager, Market Research Erik Krause, Director, Customer Experience Delivery Jose Bodipo-Memba, Director, Sustainable Community Programs Russell Mills, Director, Treasury & Treasurer Steve Lins, Deputy General Counsel</p>							

Additional Links:

ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.

2030 Zero Carbon Plan



Progress Report | March 2022

2021 accomplishments & 2022 priorities



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Introduction

It's been almost a year since the 2030 Zero Carbon Plan (ZCP) was approved by the Board in April 2021. SMUD staff hit the ground running and accomplished a lot over the last year. We are pleased to report we're on track and have either completed or made significant progress on all the priority items identified in our 12-month action plan presented a year ago, including the following:

- Performed **detailed reliability studies**.
- Performed **grid scale technology research** on carbon capture, long duration energy storage (including Upper American River Project (UARP) pumped storage) and alternative fuels.
- Secured and solicited several **solar and storage renewable projects** targeted for mid-decade completion.
- **Expanded existing and piloted new customer programs** to electrify and decarbonize Sacramento.
- Implemented a comprehensive **communications, marketing, outreach and education plan**.
- Formed a team and developed a framework for a **community impact strategy** to ensure under-resourced community participation.
- Identified opportunities and processes for **financial savings**, including establishing a robust **grant and partnership strategy** to fund our pathways to accomplish the ZCP.



This report will review the 2021 accomplishments and the upcoming priorities for 2022.

2030 ZCP to be Filed with the California Energy Commission

SMUD developed the 2030 ZCP using a comprehensive Integrated Resource Plan (IRP) process, including a comprehensive and inclusive approach to public and industry stakeholder engagement. The final step in this process is to file the ZCP with the California Energy Commission (CEC), which we intend to do this year. This administrative regulatory filing meets our obligation under SB350 (2015), which requires SMUD and other utilities to file a Board adopted IRP at least every 5 years and places our ZCP IRP on the regulatory stage for the CEC to use in various planning and study efforts and allows visibility to the industry. SMUD last filed an IRP with the CEC in April 2019 meeting the initial IRP filing requirement, of which our 2030 ZCP will supplant. Staff will bring SMUD's IRP package for Board adoption in a few months as required by statute, prior to submitting the regulatory filing with the CEC.

Downward Trends on Greenhouse Gas Emissions in our Energy Supply

SMUD's Strategic Direction 9 (SD9) - Resource Planning, contains our goals for reducing Greenhouse Gas (GHG) emissions in our energy supply in addition to other resource planning directives¹. For example, SMUD's 2020 SD9 GHG goal was to reduce our emissions to 2.318 million metric tons (MMt), equivalent to a 34% reduction relative to our 1990 level emissions of 3.5 MMt. As shown in our SD9 Board Monitoring report for 2020², we exceeded this GHG reduction goal by reducing our GHG emissions 54% below 1990 emissions, or 1.624 MMt.

As described in our annual SD9 Board Monitoring report, GHG emissions reported in SD9 are adjusted or "normalized" for factors out of our control. This includes variations in hydro and intermittent resources as well as customer load that can increase or decrease our emissions. Normalization allows us to say, "If everything came out as expected, what would our emissions have been?" SD9 also adjusts for Renewables Portfolio Standards (RPS) compliance and use or banking of surplus renewable energy credits.

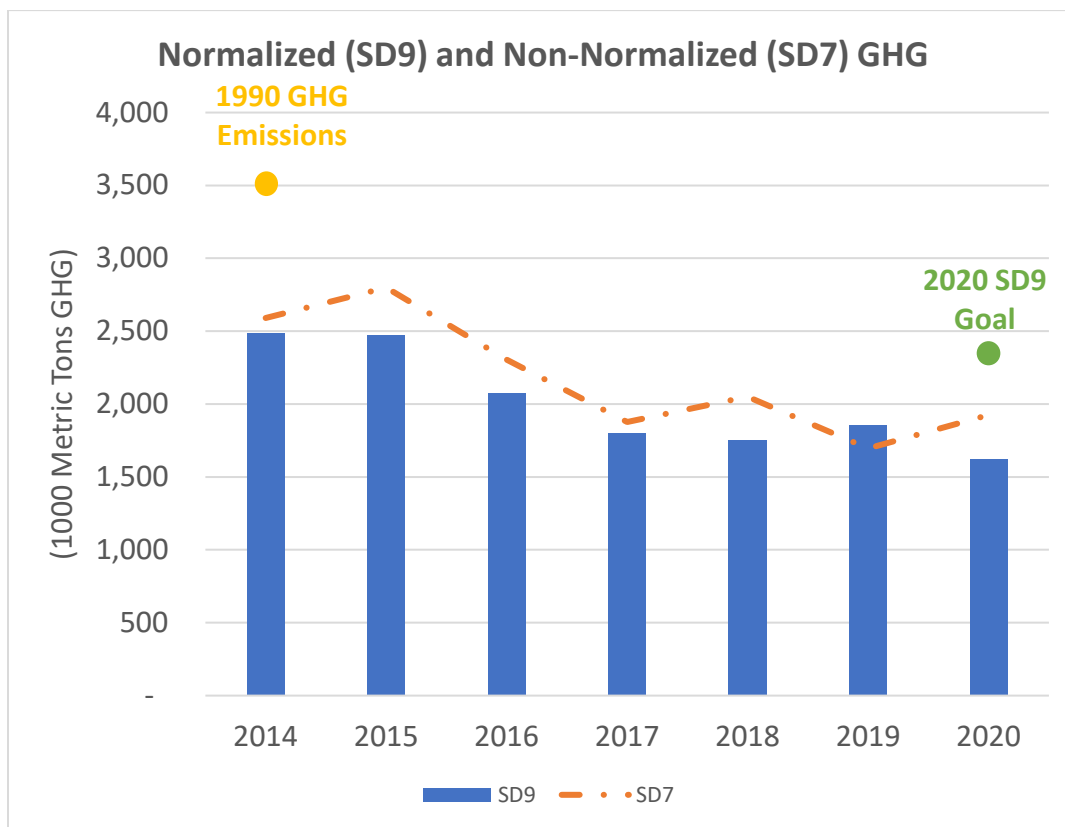
Alternatively, Strategic Direction 7 (SD7) - Environmental Leadership, reports our non-normalized GHG emissions in our energy supply. Under SD7, we report our actual energy supply GHG emissions to serve our customer's load, without considering variability in things like hydro or wind generation, or variations in load, things we do adjust for in SD9.

The graph below reports our emissions under SD9 and SD7 between 2014 and 2020. The differences between the two are the normalization and adjustment factors as described in the SD9 Board Monitoring reports. As illustrated in the graph below, our normalized (SD9) and non-normalized (SD7) emissions have been trending downwards over this period. Further, as

¹ SMUD's current Strategic Direction 9 language: <https://www.smud.org/-/media/Documents/Corporate/About-Us/Directives/Strategic-Direction/SD-9.ashx>

² SMUD's latest SD9 Board Monitoring Report: <https://www.smud.org/-/media/Documents/Corporate/About-Us/Board-Meetings-and-Agendas/2021/Sept/Updated---Final-SD-9---Resource-Planning-Board-Monitoring-Report.ashx>

illustrated, we have also made substantial reductions relative to our 1990 GHG emissions of 3.5 million metric tons.



**2021 SD9 and SD7 emissions will be finalized and reported in the SMUD Policy Committee meeting in September 2022.*

Over the last decade, SMUD has taken two very distinct actions supporting the achievement of our 2020 SD9 GHG reduction goal.

First, over the last decade, we added over 600 MW of new carbon free renewable energy to our portfolio. The table below summarizes the renewable resource additions, by resource type, that we've added to our resource portfolio over the past decade. It shows the downward trend on emissions and the approximate annual GHG emissions reduction impact from these clean resources.

Renewable Resource Additions 2010-2020

Resource Type	MW	Equivalent Annual GHG Emissions Reductions (metric tons)	Equivalent Light Duty Vehicles Removed from Road
Wind	378	512,014	110,586
Solar	182	163,216	35,252
Geothermal	51	134,432	29,035
Biogas/Biomass	19	47,541	10,268
Hydro	3	3,424	740
Total	633	860,626	185,880

**Approximate GHG reductions based on SMUD's thermal fleet average carbon intensity factor of 0.39 MTGHG/MWh.*

Second, in recent years our energy traders have made a concerted effort to identify and purchase low carbon or carbon free short-term market purchases from neighboring utilities. This has also contributed to the decline in our energy supply GHG emissions. While our energy trading team is committed to continuing the practice of identifying and procuring these low and carbon free purchases, market conditions will dictate the availability going forward.

In 2021, we added almost 200 MWs of new renewable resources and from 2022 onwards, have over 900 MW of zero emission resources in various stages of planning and development, with much more to be developed as part of our ZCP. Further, a significant number of our planned carbon-free resources are being developed locally, in support of our natural gas transition plan. With all these new carbon-free resources planned and with much more to develop as detailed in our ZCP, we expect our renewable percentage to exceed California's 2030 60% Renewables Portfolio Standard by nearly 30%. As a result, we expect our GHG footprint to continue to trend down in a significant manner as we make our journey to zero carbon in 2030.

Our emissions are trending downward, but we have much more work to do. As detailed in our ZCP, we are focused on completely eliminating GHG emissions by transitioning away from our natural gas plants, expanding proven clean technology, and exploring new and emerging technology and business models to achieve our very aggressive goals.

The following Natural Gas Generation Repurposing and Proven Clean Technologies sections detail our continuing efforts to reduce our GHG emissions in our energy supply on our way to 2030 Zero Carbon.

Natural Gas Generation Repurposing

Reliability Studies

From April through September 2021, a detailed reliability study analysis was performed and focused on two main areas:

- 1) **Thermal generator retirement** studies that evaluated McClellan and Campbell Power Plant retirements.
- 2) **Transmission planning system adequacy** studies that evaluated the ZCP, our load serving capability, and compliance with the North American Electric Reliability Corporation (NERC) Reliability Standards

Thermal Generator Retirement

A few key findings were identified in the reliability studies for the specific retirements of McClellan and Campbell Power Plants.

Retirement of McClellan would require between 70 and 110 MWs of dispatchable generation, such as battery storage, in the Northern Area of the SMUD service territory by 2024. The solution to this is adding a Northern Area Project in our service territory which is currently in the SMUD's new generation interconnection project queue with approximately 300 MW of solar combined with 150 MW of storage. This project would need to be prioritized to be online prior to the McClellan retirement planned in end of the 2024.

For the Campbell retirement, one of the necessary additions is already in process, which is the Sacramento Valley Energy Center (SVEC) that has a commercial operation date of 2024. In addition, the Campbell retirement would require an additional project (Northern Area Project) with 300 MW of solar combined with 150 MW of storage in the SMUD service territory by 2024, like McClellan.

Transmission Planning System Adequacy

For the transmission system adequacy study with all lines in service, SMUD's transmission system is adequate to implement the ZCP with the required special protection systems as an interim mitigation to meet NERC Reliability Standards.

For the 1500 MWs of local utility solar identified in the ZCP, transmission system upgrades are required such as special protection systems (also known as Remedial Action Schemes) or alternatives. RAS mitigation is considered an interim solution with less time to install and less financial commitment. For a long-term mitigation, SMUD's transmission upgrades are under evaluation to reduce and/or eliminate special protection systems to interconnect up to 1500 MW of local utility solar to improve SMUD transmission system reliability.

Two new RAS are needed to interconnect two new solar combine battery energy storage power plants -- the Sacramento Valley Energy Center (SVEC) and a Northern Area Project -- by 2025 in order to retire McClellan and Campbell thermal generation power plants. Each new facility will require a new RAS to be interconnected to the SMUD transmission system.

Post 2025 and when more new clean resources are added to the transmission system, additional RAS or alternatives will be needed and will be assessed on a project-by-project basis to ensure we meet reliability standards. The load serving capability is adequate to meet our forecasted load by 2030 and the transmission system complies with the regulatory reliability standards under SMUD's current ZCP.

Late 2020s reliability needs supporting thermal plant transition will be reassessed annually as we move forward. Many uncertainties exist such as new technology and business model development, market participation, load and distributed energy resource growth, hydro, and droughts, etc. Reaching 2030 Zero Carbon and beyond reliably could require additional resources and transmission buildout in addition to the original plan to support 100% replacement of our natural gas resources and unspecified market purchases as well as new grid scale technologies and business models.

Grid Scale Technologies Research

Significant progress has been made on the research plan presented to the Board a year ago. We hit every research area identified including Carbon Capture (both post combustion and pre-combustion), Long Duration Energy Storage, UARP Pumped Storage and Alternative Clean Fuels. These resources hold the potential to completely decarbonize our energy supply. We have gathered and analyzed this information, made decisions and pivots, and identified areas for deeper focus.

Carbon Capture – Post-Combustion

On September 7, 2021, the SMUD Board heard from a panel of representatives from the Electric Power Research Institute (EPRI), Stanford, and the Clean Air Task Force. They discussed various aspects of Carbon Capture and Sequestration. The topics covered included an update on current technical research and development activities from EPRI, an examination of potential sequestration sites in the Central Valley and across SMUD's territory, a look at the economics of Carbon Capture and Storage, and the potential to apply this technology to SMUD's ZCP.

Carbon Capture – Pre-Combustion-Net Power Allam-Fetvedt Cycle:

The Net Power Allam-Fetvedt cycle was the hot topic going into last year's examination phase. The Allam-Fetvedt technology is a proprietary process for efficiently generating electricity from natural gas while capturing all carbon dioxide (CO₂) emissions. Shortly after discovery through an employee suggestion, we asked NET Power to examine a potential pilot project in the 25MW

range. SMUD staff, EPRI, and a third-party independent consultant of experts (the bond engineers that know our power plants) did a deep dive into the NET Power offering, including the review of engineering and financial documentation provided by NET Power, participation in EPRI's in-depth study, including a physical site visit to LaPorte, TX and access to real time testing being performed under EPRI's guidance.

Through these efforts in relatively short order, we determined that while promising, the Allam-Fetvedt Cycle is at a proof-of-concept stage and does not have a commercially proven technology. The La Porte test facility had not operated for any extended time period to prove availability, operations & maintenance or economic claims at this time. Through our investigation, we discovered NetPower's relationship with their turbine manufacturer had ended. Net Power's need to identify a new turbine manufacturer significantly impacts the timeline for the project to become commercially viable. When tied with sequestration, the Allam-Fetvedt technology promises to be one of the least expensive and most efficient dispatchable zero carbon energy solutions. And combined with a zero-carbon fuel, the process can provide a negative carbon result. Everyone we talked to and all the information we reviewed demonstrated that the technology is the real deal. However, the expectations we had of a commercially ready product came up short. NET Power's Allam-Fetvedt plant won't be ready for commercial development until they identify a new turbine manufacturing partner, have a new test turbine constructed and complete their process testing at the LaPorte site, which is likely still a few years away. We'll keep our pulse on their developments. The Allam-Fetvedt is not the only carbon capture technology, and we are exploring other projects in this area.

Long Duration Energy Storage (LDES)

Our ZCP includes a significant commitment to energy storage, and lithium-ion batteries alone are not likely to meet our entire need. SMUD engaged with Black & Veatch, an industry leader in the LDES field, to perform an industry scan and help us narrow our focus for future development to those technologies that have the most potential for successful growth. Black & Veatch looked at many different types of LDES technologies. They assessed options from every category of storage medium, conducting further analysis on many technologies that had potential applications to SMUD's ZCP. The analysis included both quantitative and qualitative analysis of technical readiness level, manufacturing readiness level, geographic restrictions, operational (return) efficiency and economics (capital and levelized energy costs).

In the end, Black & Veatch recommended six technologies for further examination and pursuit. Pumped hydro is well established and may be available in a non-FERC (Federal Energy Regulatory Commission) jurisdictional application outside of SMUD territory. Liquid Air Energy Storage shows great promise as an infill application with low initial capital costs with the ability to easily expand energy storage duration. Antimony based battery systems are still in the early commercialization stages, but show immense upside for cost

Technology	Developers/Vendors
Pumped Hydropower Storage (PHS)	<ul style="list-style-type: none"> American Hydro Corporation (Currently owned by Wärtsilä) Andritz AG GE Renewable Energy Quidnet Energy
Latent Air Energy Storage (LAES)	<ul style="list-style-type: none"> Highview Power Storage MAN Energy Solutions SE
Antimony-Based	<ul style="list-style-type: none"> Ambri
Advanced Compressed Air Energy Storage (CAES)	<ul style="list-style-type: none"> Hydrostor
Flow Battery	<ul style="list-style-type: none"> Sumitomo Electric Industries Ltd. UniEnergy Technologies Redflow Limited ESS Invinity Primus Power
Zinc-Based	<ul style="list-style-type: none"> Eos ZAF Energy ZincFive Zinc8 NantEnergy

control, safety and ability to operate without significant capacity loss. Advanced Compressed Air Energy Storage is geography specific, but there is a project in California that may be of interest. SMUD has done much research into flow batteries and as that technology continues to advance, it may find a niche in our portfolio. Finally, zinc-based battery systems might be a suitable alternative to Lithium as they continue to develop.



Learning and building off our efforts with Black & Veatch, we plan to continue pursuing LDES in 2022 through Non-Disclosure Agreements and the issuance of a Request for Information to the six recommended technologies with the hope that we can enter more specific discussions with each vendor and potentially choose a pilot project for implementation.

UARP Pumped Storage

One of the concepts we hoped to get clarity on in 2021 was potentially using existing SMUD reservoirs in a pump back arrangement to store and ultimately increase the amount of energy the Upper American River Project (UARP) can generate each year. In 2020, Mesa Associates, Inc. (Mesa) had looked at all UARP reservoirs and came back with a recommendation to look at two specific locations where pump back hydro might be feasible. In 2021, we tasked Mesa to continue with this work and develop final site recommendations for conversion of the Jones Fork and Union Valley Powerhouses, provide Class 5 engineering cost estimates for each site, and develop 10% design submittals including major options for implementation.

Mesa's study of the Union Valley and Jones Fork powerhouses showed that the water depth below each generator outlet was insufficient to support a return pumping system. In order to make the pump back system work, new piping would have to be installed to allow proper water depth for the return pumps. With this piping and pump system in place, Mesa found significant energy can be stored at each location. The new penstock piping requirements add significant cost to the project, but it still

returned a calculated levelized cost of storage that was in line with other long duration energy storage options at current pricing.

	
Union Valley Powerhouse	Jones Fork Powerhouse
45MW capacity	11.5MW capacity
New Penstock required (1,450 ft.)	New Penstock required (1,220 ft. or 5,000 ft.)
272 MWh/day potential energy storage	139MWh/day potential energy storage

With these results in hand, we will hand Mesa's work off to an in-house team charged with turning this information into an official SMUD project proposal for evaluation through our Enterprise Prioritization process and comparison to other energy purchase or development options.

Alternative Clean Fuels

Finally, we narrowed our focus on alternative fuels that we can design our thermal plant retooling efforts around. The gas turbines at Procter and Carson can burn many different types of fuel, but not all reconfiguration efforts are equal, so knowing what to prepare for will make the redesign efforts go much smoother. To that end, we engaged with AECOM, a leader in this space to help guide us through an analysis of the alternate fuels market.

After reviewing many fuel types including Naphtha, bio and renewable diesel, various synthetic gasses and ammonia variants, AECOM recommended that we concentrate our efforts on Renewable Natural Gas with blended hydrogen. All other options are either cost or infrastructure prohibitive – there's either just not enough of it, it has emissions concerns, or we won't be able to compete with the transportation industry for product. AECOM's research showed a sharply declining cost curve for hydrogen leading to potential cost competitiveness by 2030. Combining our current contracts for RNG blended with hydrogen provide for a low carbon dispatchable option using existing projects that may help us meet our 2030 goal.

Rather than build fuel projects directly, AECOM recommended that we use a virtual approach and procure fuel through contracts, leveraging our pipeline and storage capabilities to shape our fuel supply. Our alternative clean fuels pathway will be to continue to monitor these emerging fuels while being prepared to take actions toward cost effective opportunities that are identified.

2022 Priorities

Our next steps for 2022 will be to:

- Finalize retirement and conditional availability plan for McClellan and Campbell.
- Determine the Carson Simple Cycle Conversion Plan, including performing a Battery Hybrid application
- Perform targeted and in-depth research on LDES (including pump back hydro) from the studies short list and determine a potential pilot.
- Monitor developments in alternative fuels.
- Finalize Concentrated Solar Power plus Thermal Energy Storage technology study.

Proven Clean Technologies

Renewable Project Update

2021 was a busy year. From a planning standpoint, we performed a lot of analysis, studies, outreach, as well as a competitive solicitation. The results were the development of a number of projects, including the Drew Solar Power Purchase Agreement (PPA) for 100 MW with a commercial operation date (COD) of 2022, as well as completing the PPA for the Sacramento Valley Energy Center Solar and Storage Project (SVEC), about 200 MW of solar and 100 MW of battery with a COD of 2024. Additionally, the Sloughhouse Project is a smaller project for 50 MW with a COD of 2023.

Lastly, we are partially through the evaluation of a number of offers for the Northern Area Project, which is in our north service territory. As determined from the reliability studies, the Northern Area Project is necessary to retire McClellan and both the Northern Area Project and SVEC are necessary to retire Campbell. In 2021, we released a Request for Qualification (RFQ). Offers came in at the end of February 2022 and final awards are expected sometime in May. For 2022, in addition to managing the RFQ for the Northern Area Project, we will be launching a second competitive solicitation for additional proven clean technologies.

As we move into the mid-decade, there is a bulk of the ZCP resources identified for the 2025 to 2028-29 timeframe. Much of the negotiation and analysis will be kicked off in 2023 to be able to achieve those goals. There's a fair amount of work to be done between now and the middle to end of the decade. Specifically, more analysis needs to be done around firming up our resource plan, siting of local utility solar and storage and all the interconnection studies, and several different delivery options of non-local renewables and what it means from a transmission study analysis and market rules. We will also be studying low hydro impacts in conjunction with the reliability studies and determine what that might mean from an energy supply standpoint between now and the end of the decade to meet the ZCP.

Our new renewables by 2025 will reduce carbon by nearly 1 million metric ton (MT) (almost 50% of current carbon footprint) and allow us to retire both McClellan and Campbell Power Plants. We are going to double our RPS resources (based on energy) and meet about 25% of our total energy sales with new renewables coming online in the next 3-4 years, 11% above the

2024 44% RPS requirement and well ahead of schedule to achieving the State's 2030 60% RPS requirement (our ZCP is shooting for ~90% renewable by 2030).

The new resources in the next 4 years will provide enough energy to power 300,000 homes, an estimated carbon reduction of about 1,100,000 metric tons per year, the equivalent of removing about 230,000 gasoline cars from the road.

The new resources include the following in the calculations above:

- Geothermal (100 MW Geothermal)
- Drew - NTUA (100 MW Solar)
- Solano 4 (91 MW Wind)
- SVEC (200 MW Solar + 100 MW Battery)
- Sloughhouse (50 MW Solar)
- Northern Area Project (344 MW Solar + 170 MW Battery)

New Technology & Business Models



Building Electrification & Energy Efficiency

Encourages customers to decarbonize their homes and workplaces, including reducing electricity usage and/or converting from gas to efficient electric appliances and equipment.



Transportation Electrification

Special rates and incentives that make it more affordable to buy and power electric vehicles for homes or businesses and support infrastructure development and managed charging.



Load Flexibility

Creates opportunities for customers to reduce load during times when the grid is under stress or increase load when there is excess renewable power.



Thermal Transition

Research into alternative fuels and storage technologies as clean, reliable generation solutions to enable the retirement or retooling of our thermal plants and support our transition to a carbon free generation resource mix.

The technologies and business models in this section encompass a wide variety of programs and projects that in aggregate comprise an important set of resources and activities associated with delivering on the goals of the ZCP. For the purposes of this report, these have been grouped into 4 “portfolios” comprised of programs and projects with generally common objectives and goals.

Each of the portfolios is described in more detail to follow, but some additional context is provided here:

- The programs and projects in each portfolio are based on their primary goals and objectives, however, there are plenty of cross-cutting programs that include multiple technologies and services from multiple portfolios. One example of this is our Complete Energy Solutions program for commercial customers. While that program focuses on electrification and energy efficiency, it also includes electric vehicle charging and load flexibility components that are presented to customers based on

their needs and wants. The point here is that we can meet our customers' needs in multiple ways and try to meet them where they are in their decision-making process and in the channels and methods that they prefer.

- Many programs and services encompass a variety of options, delivery methods, marketing messages, and approaches based on customer segmentation and preferences. Some clear examples of this are programs and services provided for low income or disadvantaged communities and our partner agencies. Some of these are implemented and delivered by our partners in the Customer Experience Delivery and Sustainable Communities organizations and will be described in more detail later.
- The portfolios encompass a total of about 30 customer programs and roughly equal number of research and development projects and studies planned or in flight for 2022. Some of the key programs and projects associated with each are listed in the following sections categorized by residential or commercial programs and research and development pilots or projects.

Building Energy Efficiency and Electrification

Residential Programs	Commercial Programs	Research & Development
<ul style="list-style-type: none"> • Advanced Home Solutions ➡ <ul style="list-style-type: none"> • Contractor driven program for sealing, insulation, heating & cooling, and water heating incentives. • Home Electricity Reports ★ <ul style="list-style-type: none"> • Personalized electricity use reports with a focus on carbon. • Home Appliance Rebates <ul style="list-style-type: none"> • Retailer incentives for efficient products and appliances • Customer incentives for induction cooktops. • Zero Carbon Weatherization ➡ <ul style="list-style-type: none"> • Direct install retrofits for EAPR customers. 	<ul style="list-style-type: none"> • Integrated Design Solutions ➡ <ul style="list-style-type: none"> • Builder incentives for commercial new construction. • Smart Homes ➡ <ul style="list-style-type: none"> • Builder incentives for residential new construction. • Complete Energy Solutions ➡ <ul style="list-style-type: none"> • Turnkey program for comm. retrofits. • Custom Retrofit ➡ <ul style="list-style-type: none"> • Incentives for large and/or specialized projects. • Express Energy Solutions ➡ <ul style="list-style-type: none"> • Menu based incentives for individual measures and retrofits. • Multifamily Retrofit ➡ <ul style="list-style-type: none"> • Apartment owner incentives for energy efficiency and electrification. 	<ul style="list-style-type: none"> • Technology Assessments ★ <ul style="list-style-type: none"> • 120V Heat Pump Water Heater Trial • St. Francis Manor Central HPWH • Commercial Kitchen Electrification • Grid Infrastructure needs in support of electrification • Industry Association Support <ul style="list-style-type: none"> • Advanced Water Heating Initiative • Electric Power Research Institute • Emerging Technologies Coordinating Council (EETC) • Consortium for Energy Efficiency-Emerging Technologies Collaborative • Codes and Standards <ul style="list-style-type: none"> • Policy development for state building and appliance regulations.

★ = new program ➡ = expand program

Strategic Alignment: SD-9 & SD-10



The Building Electrification and Energy Efficiency portfolio represents one of the more mature and long-standing portfolios, although over the past two years and in response to the zero-carbon plan, has been redesigned with a much heavier focus on beneficial building electrification. While our focus on energy efficiency remains steady and relatively flat over time, development and implementation of the building electrification programs and projects are planned to see a significant increase year over year to meet the goals of the ZCP.

Many of the programs in this portfolio are being expanded relative to prior years with an increasing focus and goals on electrification. Just to speak to a handful of programs and projects:

- The **Advanced Homes Solutions** program is our flagship residential contractor-driven program in this portfolio, which provides rebates and incentives across multiple

measures and technologies to encourage homeowners to improve the energy efficiency of their homes and convert heating and water heating equipment from gas to electric. In 2021 ~1400 HVAC gas to electric conversions took place through this program and for 2022 our goal is to increase this to ~2000.

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- On the commercial side of our programs, the **Integrated Design Solutions** and **Smart Homes** programs are key areas of focus to encourage and accelerate the development and construction of all electric or electric ready commercial and residential developments in our service territory by working with and providing incentives to developers and builders. In 2021 the Smart Homes program saw ~280 single family (SF) new homes and ~300 new multi-family (MF) units completed. In 2022 our goal is to more than double these numbers to ~700 SF all electric homes and ~600 all electric MF units.

In 2021, this portfolio achieved a total of ~100 GWh of savings from energy efficiency and this will remain relatively similar in 2022 with an expected savings of ~110 GWh. For building electrification, we ended 2021 with ~18 equivalent GWh from the building electrification elements of the portfolio. For 2022, our projected targets are to achieve ~27 equivalent GWh representing a 50% increase from these measures.

Equivalent GWh in this case is calculated as the amount of gas savings from electrification measures in Therms, converted to GWh, less the increased electrical load.

Some of our key Research & Development efforts for 2022 are focused on exploring technologies that are needed to facilitate the transition to electric water heating in residential and commercial buildings as well as supporting electrification of commercial kitchen applications. Key projects include:

- **120V Heat Pump Water Heater (HPWH)** trial – This project is part of larger national effort to evaluate and test this emerging technology option for heat pump water heaters and investigate the customer experience and viability as a low-amp option to facilitate gas to electric retrofit installations with fewer/cheaper electrical infrastructure upgrades
- **Commercial Kitchen Electrification** – We plan to monitor pre/post electrification retrofit at a commercial kitchen and develop a case study to document experience, performance, costs and challenges. This study will be a contributing element to a broader plan to cost-effectively address this segment, which has some significant technical and economic barriers to decarbonization.
- **Grid Infrastructure** – This study and analysis will assess building infrastructure needs to support full electrification of buildings, transportation, and addition of battery storage, beginning with our residential single-family segment.
- **Statewide Code & Standard (C&S)** support – This includes active participation in Title 24 Building Standards transition to encouraging all-electric opportunities construction, as well as support for Title 20 Appliance Standards and Federal Standards Advocacy.

Transportation Electrification

Residential Programs	Commercial Programs	Research & Development
<ul style="list-style-type: none"> • Charge @ Home ★ <ul style="list-style-type: none"> • Home charger install rebates. • Drive Electric Outreach Events ⚡ • EV Support Program <ul style="list-style-type: none"> • Online and telephone support for residential customers for all EV and EVSE related questions. • Dealer Engagement <ul style="list-style-type: none"> • Sales staff education + incentives. • Clean Fuel Reward <ul style="list-style-type: none"> • Statewide install rebate at point of sale. • Clean Cars for All <ul style="list-style-type: none"> • EVSE installs for low-income customers. • Renewable Energy for EVs • EV Off-Peak Discount Rate 	<ul style="list-style-type: none"> • SMUD eFuelSM ★ <ul style="list-style-type: none"> • Advisory and installation services for commercial charging systems • Commercial EV Program ➡ <ul style="list-style-type: none"> • Vehicle and charger incentives for fleet, workplace, multifamily, schools. • LCFS Credit Sharing ➡ <ul style="list-style-type: none"> • Share proceeds from credit sales with eligible Commercial customers. • Commercial EV Pilot Rate ★ <ul style="list-style-type: none"> • Rate that address demand charge barriers for EV charging • CALeVIP <ul style="list-style-type: none"> • State incentive program for charger installations in commercial buildings 	<ul style="list-style-type: none"> • Electric school bus Vehicle-to-Grid ★ <ul style="list-style-type: none"> • Utility initiated discharge from battery to grid. • Residential/Light duty Managed Charging pilot ★ • eMobility Hubs in DACs ➡ • CEC Reach grant applications for EVSE installations in underserved or DAC multifamily dwellings ★ • Charging technology assessments • Equity and accessibility research • Modeling & Certifications of Low Carbon Intensity (LCFS) Electricity Pathways and Electric Renewable Identification Number (eRIN)

★ = new program ➡ = expand program ⚡ = reboot program



The Transportation Electrification portfolio of programs and projects will see a significant growth in scope and the addition of some key new programs and projects this year. Some background and general observations to provide context on this portfolio:

- Funding from the sale of Low Carbon Fuel Standard (LCFS) credits accrued to SMUD pays for the majority of the programs in this portfolio. LCFS funds are required to be utilized for the promotion of electric transportation options and solutions for customers.
- LCFS rules also mandate that a certain percentage of the funds be dedicated towards promotion of electric transportation in disadvantaged and/or low-income communities and customers. The percentage for 2022 is 30% of residential base credits remaining after funds allocated to the California Clean Fuel Rewards program is first calculated. This percentage and climbs to 40% in 2023 and tops out at 50% in 2024.
- We are collaborating with the Customer and Grid Strategy teams on updating and developing a comprehensive Electric Vehicle (EV) strategy and plan which will be presented to the Board in April and will include additional detail and information on our plans going forward.
- In general, our first couple of years of the efforts in this portfolio have been focused on customer education and getting cars in driveways. Starting this year, a significant added focus of this portfolio is to get chargers in home garages and businesses.
- In 2021 ~400 EV chargers were installed through our programs and in 2022 we expect to more than triple that with a variety of residential and commercial installations across different customer segments and applications.
- We also estimate an increase of ~23% in the number of EVs in our service territory as more models become available and some of the supply chain constraints ease. In terms of numbers, that estimate would see an increase from ~23,500 to ~29,000 total vehicles. Sales of EVs in CA have now risen to 12% of all new vehicles sold annually.

Program Highlights:

- **Residential Charge @ Home:** An initial launch of this new residential program took place in January, which provides incentives for residential customers to purchase level 2 chargers and install them in their homes. This program will be expanded and paired with our Advanced Home Solutions program and contractor network over the next few months with a goal of 800 installations this year.
- **SMUD eFuel:**
 - *Advisor* component launched this year to deliver a no-cost, customized analysis of fleet and businesses' electric transportation future. The program is focused on businesses with fleet vehicles and employee parking as well as multifamily dwellings.
 - *Solutions* is an installation service that removes key barriers of vehicle electrification by offering SMUD's technical expertise, project management experience and bulk pricing. Businesses that choose to move forward with EV charging solutions will receive a no- or low-cost installation in exchange for a monthly fee on a SMUD bill. This portion of the program is targeted for launch in Q2 of this year and is currently in the Request for Proposal (RFP) stage.
- **Twin Rivers Unified School District Commercial Managed Charging (V1G and V2G) and expansion of V2G:** The Twin Rivers Unified School District (TRUSD) has 16 electric school buses in their possession equipped with technology that enables discharge of the bus battery through a compatible charger to their facility loads or grid. The bus electrification was supported by state grants awarded to the TRUSD. TRUSD, SMUD, and other partners were recently awarded the CEC BESTFIT grant to demonstrate intelligent charging functions such as Automated Load Management (ALM), Managed EV Charging (V1G), and Vehicle to Grid discharge (V2G). ALM helps customers reduce their electricity bill by charging more off-peak cost time periods, reducing demand charges, and possibly avoiding local distribution upgrades. V1G provides demand response and load shifting services to the utility. V2G can allow EVs to behave in a similar way as a utility controllable stationary battery storage system. In 2022 the V2G charger installation will be completed. V2G testing will also begin and extend into the following year. A follow-on project is proposed to extend this electric school bus V2G demonstration to potentially 2-3 other interested school districts.
- **Light Duty Residential Managed Charging:** This pilot will focus on residential EV charging to soften the grid impact of nighttime charging on the grid and favor consumption of lower cost cleaner daytime energy (solar overgeneration). Vehicle telematics compatible with GM, Ford, and BMW vehicles will be used to time charging. Use of telematics does not require replacement of existing customer chargers with a smart charger which greatly simplifies customer enrollment. 1,000 customers will be targeted for this pilot over the next two years and both Level 1 (120V) and Level 2 (240V) charging will be allowed. The intent of softening grid impacts is to avoid overloading service transformers and their upgrades, reducing the

cost of transportation electrification. Consuming lower cost cleaner daytime energy will optimize the economics for significant decarbonization of SMUD's energy supply planned in the ZCP.

Load Flexibility

Residential Programs	Commercial Programs	Research & Development
<ul style="list-style-type: none"> • My Energy Optimizer (formerly Virtual Power Plant) ★ <ul style="list-style-type: none"> • Partner: Aggregates loads from participating smart thermostats and battery storage units (and potentially EV's) for load shed events. Includes integration with CPP rate. • Partner+: Aggregates loads from direct control of participating customer-sited battery energy storage systems. • Behavioral Demand Response (BDR) <ul style="list-style-type: none"> • Pilot program to test customer response to load shed events • Next Gen ACLM – Planning <ul style="list-style-type: none"> • Two-way cycling devices for AC load management/control 	<ul style="list-style-type: none"> • PowerDirect® ➡ <ul style="list-style-type: none"> • Load reduction through pre-programmed and automated control of selected equipment. • StorageShares <ul style="list-style-type: none"> • A virtual alternative to on-site battery storage for customers that provides bill savings while also providing grid benefits to SMUD 	<ul style="list-style-type: none"> • Smart inverter testing <ul style="list-style-type: none"> • Test feasibility of smart inverters to provide grid services. • PRECISE software development deployment to allow customized PV smart inverter settings for interconnection • Smart Energy Optimizer (SEO) <ul style="list-style-type: none"> • Pilot project with a small number of customers that allows SMUD to dispatch 51% of battery capacity • PowerMinder <ul style="list-style-type: none"> • Pilot project with residential customers to test load shifting with Wi-Fi connected heat pump water heaters

★ = new program ➡ = expand program



Perhaps the portfolio that is anticipated to see the most significant change and focus is our Load Flexibility suite of programs and projects. The ZCP includes a heavy emphasis on planning and implementing programs that take us much further than we have in the past in promoting, expanding and tapping into Distributed Energy Resources and sharing the values of these with our customers. While we do have some long-standing and mature "Load Management" programs (for example our ACLM/Peak Corps program has been in continuous operation since the late 1970's), these have typically been utilized primarily for emergency load curtailment or for very limited economic dispatch events.

Starting this year, we will be implementing some significant pilot programs to begin to build out and test the scope and reliability of our "Virtual Power Plant" initiatives, which we've named "**My Energy Optimizer**" after receiving input from customers.

Over the next few years, the results from these pilot programs will be a critical factor in determining the balance and need for additional resources necessary to support the retirement or retooling of our thermal plants. If we are successful in making electrification attractive to our customers, having access to shared use of controllable loads will reduce the need for additional generation and provide grid support that will reduce the need for distribution system upgrades.

My Energy Optimizer (Virtual Power Plant):

- SMUD will launch two new offerings in 2022. The Partner level will accommodate thermostats, batteries with a Critical Peak Pricing (CPP) rate, and eventually EVs. The Partner+ level will be battery only.



- Virtual Power Plants (VPPs) are aggregated, controlled distributed resources (such as storage, solar, EV charging and demand response or load flexibility) to meet utility demands and replace some of the services typically provided by traditional generation sources. VPPs are a way of sharing resources and value with our customers to achieve a carbon free portfolio. Because this approach to load management will serve a critical role in our thermal transition plan, we need to launch and test them quickly to allow time to course correct before we scale widely as adoption of EVs and storage take off.
- 2022 will be a ramp up year with the goal of enrolling approximately 10,000 customers by the summer of 2023.
- Uplight was selected for the Partner level (formerly known as the Multi-DER VPP) and they are currently in launch preparation mode.
- The program will serve as the gateway for customers to enroll on the new CPP rate and allow enrolled devices to be automatically adjusted during CPP events, which provides SMUD with reliable load flexibility and the customers automated participation to reduce the impact of events, as well as financial incentives for enrollment and continued participation. Load flexibility and scaling programs like the Multi-DER VPP is crucial to meeting SMUD 2030 ZCP.
- My Energy Optimizer is residential only. Eligible devices are smart thermostats and storage.
- The second My Energy Optimizer level is Partner+ (formerly the Storage Virtual Power Plant). The solicitation has been released and the program is planned for launch in summer 2022.
- The program may also include commercial customers depending on the type of implementer chosen through our solicitation process.
- My Energy Optimizer will focus on battery energy storage and smart thermostats at the onset, but these programs are built to accommodate multiple distributed energy resources in the future such as EVs, EV chargers, AC switches, and more.

Behavioral Demand Response (BDR)

In 2021, we ran a successful BDR pilot with approximately 50,000 customers to determine customer response and load shed potential over the course of multiple events during the summer. In this pilot, customers are notified ahead of time of the need to reduce loads voluntarily and are then provided information on how they did relative to a cohort of similar customers. The pilot results showed promising results that we hope to build on in the future. In 2022, however, we plan to take hiatus with for BDR as we plan and launch our other VPP programs and look to examine how best to resume and scale the BDR pilot in future years.

Next Generation ACLM:

- This effort is currently prioritized for planning in 2022 with a proposed launch in 2023.
- It would install two-way controllable switches on ACs, replacing the long-standing PeakCorps or ACLM emergency load offering by offering greater grid benefit and customer experience.

PowerDirect

- PowerDirect is our auto-demand response program for C&I customers. We will be seeking to update this program with a new implementer in 2022 and are planning to incorporate additional options to help meet our 2030 goal.
- We're at 15.2 MWs for 2022 and the program is planned to be ramped up to 30 MWs by 2030 representing an average additional 2 to 2.5 MW of controllable load over the next 6 to 8 years.

StorageShares

Through StorageShares, customers enjoy the benefits of demand charge reduction through bill savings without the burden of battery storage installation, maintenance, and ownership. Customers purchase “shares” of utility scale battery systems operated by SMUD, installed at a beneficial location on the grid, and receive monthly bill credits over a 10-year contract term. Upfront funds received from participants help to offset costs of SMUD’s utility-scale battery at the Hedge substation which provides the 4,400 shares for the program. The number of shares a customer is eligible for is limited to the potential benefit a physical behind-the-meter battery system could provide and is suited to help managed load shapes with high peaks (such as EV charging) but not for customers seeking back-up power

The Load Flexibility portfolio also represents an example of the intersection and crossover of program implementation with Research & Development. While the My Energy Optimizer programs represent large scale pilot programs that include a significant research element, several other more focused **Research & Development** projects are also included within this effort.

Smart Inverter Testing:

The PRECISE tool (PREconfiguring and Controlling Inverter Setpoints) co-developed by SMUD and the National Renewable Energy Labs (NREL) is going live this month as part of the interconnection process. PRECISE enables interconnection of more behind the meter (BTM) PV on the SMUD system while mitigating grid power quality issues and increased customer savings by leveraging advanced inverter settings. PRECISE enables PV smart inverter integration with the SMUD system and enhances the system’s hosting capacity. PRECISE will help distribution engineers to seamlessly interconnect and integrate high penetrations of PV generation on today's grid in a safe, cost-effective, secure, and reliable way.

This year we are also launching a smart inverter project to test direct-connected and aggregator-connected smart inverters for their monitoring and grid support capabilities. We will also assess business models and relationships with third-party equipment and service providers. The project is intended to provide a test environment for DERMS development and testing.

Smart Energy Optimizer (SEO):

The Smart Energy Optimizer pilot that allows SMUD to dispatch at least 51% of battery capacity for residential customers with SolarEdge batteries will continue in 2022. The lessons learned from this pilot informed the development of My Energy Optimizer

Partner and Partner Plus programs, intended to replace SEO. These SEO customers will be given an opportunity to transition to My Energy Optimizer portfolio (Storage VPP) when that program goes live.

PowerMinder:

The PowerMinder pilot allows SMUD to manage and shift water heating energy use to different times of the day that can take advantage of lower rates or reduce loads on the grid. This pilot currently includes GE and Rheem controllable heat pump water heaters that include an automatic mixing valve. Early results from this pilot have shown the need for improving the technology and reliability of the control systems for these water heaters in order to increase the value and anticipated load potential contribution to the ZCP. The pilot will continue field testing as technology and communication system improvements are implemented in 2022.

Thermal Transition & Grid Services

Our research efforts for the ZCP fall within two pillars: Customer Solutions and Thermal Transition Solutions. This two-pillar structure was the basis for reorganizing our R&D team as part of the realignment process last year.

The Customer Solutions pillar includes the Building and Transportation Electrification and Energy Efficiency research projects while the Thermal Transition Solutions pillar includes the Utility-Scale Storage, Generation, and Carbon Capture and Sequestration. Load Flexibility is jointly addressed by both pillars because it seeks to displace the grid services associated with the Thermal Transition Solutions pillar but depends on customer uptake of emerging technologies that electrify transportation and other end uses associated with the Customer Solutions pillar.

Some of the Research and Development projects in flight include:

Hedge Utility-Scale Storage Project:

The Hedge utility-scale project is a 4 MW /8 MWh battery. It is SMUD's first utility-scale battery controlled by grid operations. Interconnected at 12 kV, this resource will be scheduled and operated by Distribution Operations via the Advanced Distribution Management System. A variety of distribution and bulk grid use cases will be tested as a learning opportunity for Power Generation and Distribution Planning and Operations.

SMUD solar port microgrid:

The solar port microgrid adds additional resiliency to the 175 kW high speed DC fast charger at the SMUD solar port that is already coupled to a car port solar PV array and 120 kWh stationary battery built from second life Nissan Leaf batteries. The battery at this site was previously used to cushion the DC fast charger's infrequent but intense demands on the electrical grid. The microgrid upgrades to this site will enable testing of islanding and the ability for charging to continue to be active if the grid power is down.

Carbon Sequestration Research:

We completed a carbon capture assessment at Cosumnes Power Plant (CPP) last year. This year we will perform a techno economic and geologic study at the Solano wind site for the potential for storage of CO₂ and Hydrogen Power to Gas.

To support Power Gen's evaluation of commercial readiness of the Allam-Fetvedt Cycle to capture carbon emissions, R&D facilitated participation in an EPRI project performing an economic analysis of the cycle, with final report expected around May 2022.

SMUD is partnering with EPRI and the Xerces society (focused on pollinator conservation) to help answer some key questions around whether the use of native plants and pollinators at local solar farms helps reduce operational costs concerning erosion and vegetation management and quantify soil carbon measurements to understand the relative impact and implications regarding SMUD's ZCP.

Research Studies and Assessments:

We have about two years to make decisions about thermal replacement solutions, given the long lead time to construct alternative grid-scale solutions and this is an important part of our overall research portfolio. Last year we completed a Long Duration Energy Storage (LDES) market and technology characterization as well as an assessment of alternative fuels. The next step will be to issue an RFI and look at possible pilots to evaluate technologies that have the potential of delivering LDES at a scale (for example energy storage of 100 MW for 10 hours). Further research on alternative fuels will take a deeper dive on shortlisted technologies such as Renewable Natural Gas and Renewable Hydrogen. The latter is specifically focused on research on hydrogen blending in collaboration with the National Renewable Energy Laboratory (NREL) and US Department of Energy.

Current and Projected Distributed Energy Resource Targets

The information below provides our current assessment of where we stand relative to the goals associated with our Distributed Energy Resource (DER) programs that correlate with some of the different portfolios described in this section and listed in the ZCP. These are described in terms of the metrics and units currently associated with each of the DER components:

Building Electrification

We are on track to meet the "Cumulative Equivalent All-Electric Homes" targets. In 2021 we completed building electrification installations resulting in more than 1,800 equivalent all-electric homes. For 2022, we will add another 3,600 which will meet or exceed our current planned trajectory.

For reference, an "Equivalent All Electric Home" does not require an individual home to be all electric. This metric considers the impact of electrifying individual devices and the aggregated impact at the community level. This metric is the combination of commercial and residential applications. Using 3,300 kWh as an equivalent home (an existing single-

family home is estimated to add 3,300 kWh of electricity post complete electrification). Note that a commercial building could be many existing equivalent homes and a new single-family home could be a fraction of an existing single family equivalent home.

Transportation Electrification

In 2021, there were 23,576 light duty EVs in operation in SMUD territory according to data from the Electric Power Research Institute (EPRI). This year we are expecting that number to increase to 29,000, which is a 23% increase. By the year 2030, we expect this number to jump to 288,000 light duty EV's in operation, which is more than a 1,000% increase from where we are today.

- Note: "in operation"- means new vehicles, used vehicles and vehicles that were sold- and is the EPRI term for the true number of EV's in our service territory.

Load Flexibility

In 2021, we added 5 MWs of new load from this portfolio. In 2022, we anticipate adding another 7 MWs primarily through the launch of our Virtual Power Plant (VPP) programs as well as incremental addition from remaining programs in this portfolio. By 2030, our net additional load flexibility resource is projected to jump to more than 360 MW's, which is a significant increase from where we are today. Most of this increase is planned to come from our VPP programs to manage customer-sited AC load, EV charging, water heating and storage. This value is the **Zero Carbon Plan Base Case MW Capacity** and is based on the baseline level of DER adoption sized to fill the resource gap needed to reach our ZCP goal.

Maximizing Community Benefits

Communications, Marketing and Outreach

2021 Goals and Priorities

Our job in 2021 was clear – to develop and implement a comprehensive communications, marketing, outreach and education plan. We had two goals: To create awareness of our zero-carbon goal and awareness of two key data points – that we live in one of the dirtiest air basins in the country and that Sacramento's childhood asthma rates are unacceptably high. This messaging helped solidify in people's minds why our zero carbon goal matters.

Secondary messaging was to reassure customers that we wouldn't waver in our commitment to providing safe, reliable and affordable power.

Phase 1 of our efforts started months before the ZCP was even in place. We've previously shared with the Board our outreach to customers in



virtual forums and listening sessions to road test our goal, messaging around the why and level set understanding and support. This data would help us inform our strategy for broad marketing, communications and outreach. We were sure to explain the broad benefits our vision and goal would provide to our customers and community. Key messages included:

- We live in one of the most polluted cities in the country and local asthma rates in children are higher than the national average.
- We are experiencing rising temperatures, which have a negative impact on our environment and the economy, creating a climate crisis that needs to be addressed. Under-resourced and low-income communities are impacted even more.
- While we're on a trajectory of improvement, we recognized that there's still more to be done and there's no time to waste. SMUD is in a unique position to help move the whole region along and be the example for others to follow.



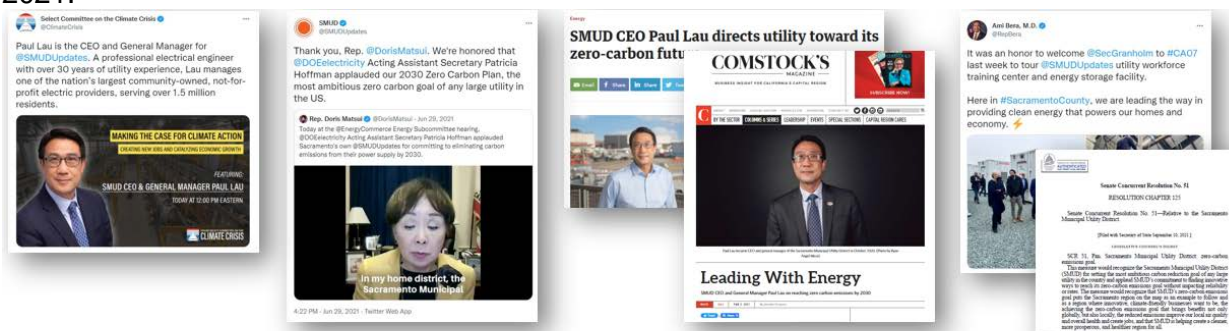
Leading up to the formal launch of the ZCP and our overarching umbrella campaign, we actively listened to our community, collected their feedback and input and used that to inform our messaging and campaign. We directly connected with 1,500 customers, stakeholders and community leaders to get their input before the ZCP or campaign were launched. This included discussion panels at board meetings with industry experts, moderated stakeholder listening sessions, dozens of far-reaching as well as targeted virtual community meetings and even more outreach presentations at various community events, infusing our zero carbon education message into every opportunity that we could.

2021 Accomplishments

Immediately following the Board's approval of the ZCP in April 2021, we launched one of the biggest and most comprehensive campaigns in SMUD's history. Our umbrella "Clean PowerCity Campaign" was multi-language and multi-channel, and we introduced a lot of new things we'd never tried before. It stretched across traditional marketing channels and extended into our broader PR, outreach, education, social media and news media efforts. Everyone played an important part in sharing the message. We designed and implemented 2 iterations of the campaign last year to engage all of our customers and community, one in the spring and one in the fall. The umbrella campaign included TV, radio, community, regional and national print publications, outdoor and digital advertising, videos, sponsorships and other community



events and partnerships. They supported our goal to make sure our customers and others were aware of our goal and why it's important. We used all the traditional tools in our tool belt, and tried some things too, particularly to connect with the younger generations and engage their passion for the environment. We launched our first ever TikTok challenge, which we believe is a first for a utility. In just 2 weeks, we received more than 22,500 engagements/likes/shares and 965 followers. We reimagined all of our green program marketing to align with our Clean PowerCity campaign, things like our EV and go electric campaigns. We encouraged our customers to Join the Charge, resulting in 5,000+ Clean Power City Champions by the end of 2021. Through email outreach, digital communications, social media, listening sessions, easy-to-use QR codes, community outreach and events, speaking opportunities, virtual forums and more – our ZCP and Clean PowerCity Campaign was infused into virtually everything we did in 2021.



52% Clean Energy Vision Awareness

90%

Support Clean Energy Vision
Once customers are aware

#1

J.D. Power Syndicated Sustainability Study
2022 YTD for residential & commercial customers

When we step back and take stock of 2021, it's clear the message about our ZCP and industry leading goal was heard far and wide. From Paul Lau's invitation to testify in Congress about the far-reaching benefits of the ZCP, to accolades from Congresswoman Matsui, DOE Secretary Jennifer Granholm and more, our message reached far beyond the Sacramento Region. And we know this is critical to forging partnerships, securing funding and the like.

Locally, publications like Comstock's Magazine and the Sacramento Business Journal, showcased our innovative and inclusive approach to a clean energy future in feature articles.

And there was even a Senate resolution commending our ZCP and ambitious zero carbon goal. By the end of 2021, the momentum was growing in the form of visibility and support from our customers and community. By December, awareness of our Clean Energy Vision was 52%, a significant achievement in less than a year.

And of customers who are aware of our Clean Energy Vision, 90% support it.

In J.D. Power's 2022 mid-point Sustainability Study—which is an in-depth residential and business survey examining customer attitudes towards climate change, customer awareness of their utilities plans and levels of customer engagement and advocacy. SMUD ranked #1 out of 35 brands study throughout the nation.

2022 Priorities

As we saw in 2021, no single communication, marketing, education or outreach channel alone can achieve our goals. We're working on the creative for the second phase of our campaign. We set the foundation on why SMUD is doing this in 2021.

Now in 2022, we're transitioning our marketing, communications and outreach to focus on the things SMUD is doing to achieve our zero carbon goal and the things our customers can do to help us get there. We'll start by sharing what we're doing to reach our goals as an organization, for example how we're electrifying our fleet, installing more local solar and utility-scale battery storage and promoting the many other projects and programs. We know the Zeus trucks will hit our Fleet this year, and we're excited to showcase these exciting new developments.

We'll build upon the strong foundation created in 2021 and continue to tell the story of our 2030 Clean Energy Vision, why it's important, more specifically, what our customers and community can do to come along on this journey with us toward a clean energy future.

The next phase of our Clean PowerCity campaign is in development, and we'll deliver 2 more multi-lingual, multi-channel marketing campaigns this year, along with digital communications, targeted social media, continued research and ongoing listening sessions, virtual forums and digital focus groups. That continued outreach to hear directly from our customers will be important to ensuring our mass and segmented messaging resonates.

By the end of 2022, it's our goal to have more than 50,000 Clean PowerCity Champions signed up to Join the charge and support us on our journey toward a clean energy future.

As we continue to navigate out of the pandemic, we're looking to really leverage our community partners to maximize reach and participation.

We have a new partnership for the California International Marathon (CIM), and, of course, Museum of Science and Curiosity (MOSAC) and the Kings, in addition to many smaller partnerships will help us reach a range of audiences. Arts partnerships MOSAC and others will help us boost engagement in Clean PowerCity, with a focus on youth and families. Youth outreach includes partnerships with schools, clubs and nonprofits like Future Farmers of America and Safetyville. This will help us to expand our reach and engagement with younger generations. We'll continue to proactively showcase our goal and the work we're doing to reach our goal of zero here locally and beyond.

We're so appreciative that the Board has taken such an interest in helping us tell the story and encourage our customers to Join the Charge. You saw on a previous slide that there were more than 100 speaking engagements about Zero Carbon between the Board and Paul last year, and we're moving full steam ahead again this year.

SMUD employees have been trained as Clean Power Champions who'll take advantage of speaking opportunities where they can share more about our ZCP with our customers and

community. We'll also be developing an employee ambassador/advocacy program for social media. It will give our employees the tools to share out SMUD contact to their networks. We know people trust their friends, family and connections, so this is a great way for us to amplify our message and reach even more people. We will do this with our trained clean power city champions employees who will take advantage of speaking opportunities and employee ambassador program for social media.

Customers have been asking what they can do to help. With part 1 of our campaign successful in getting the word out about the goal and why it matters, we're excited to help our customers really join the charge. We are excited to bring all the programs in development to our customers. We know it's critical to meet our customers where they're at. Some of the things planned for 2022 include:

- Zero carbon volunteer projects in Board Ward areas.
- Community drives similar to the successful 2021 e-Waste drive.
- All-new neighborhood groups and Homeowner Associations efforts with partnership agreements and community events to support the Clean Energy Vision and get feedback on SMUD programs and initiatives.
- Focused, young adult/youth outreach and presentations including in-classroom, clubs and social media thought leadership/influencers to encourage the youth voice in amplifying Clean PowerCity Champions.

Just like 2021, we have some new things planned for 2022:

- A Clean PowerCity microsite – a one-stop shop for customers to learn more and Join the Charge.
- Transformer wraps and fleet vehicles with a Clean PowerCity message.
- Interactive digital tools to help customers learn about clean energy solutions.
- Road to Zero Carbon video series featuring SMUD employees.
- A new series of short-animated tips videos for customers of all incomes and types to implement for a cleaner environment.

This is a long-term and all-hands-on-deck effort. Our broad marketing, communications and efforts are integrated with our much more targeted efforts to reach specific segments. Getting the word out about what we're doing and where we're headed is going to take a collaborate effort to maximize our reach and impact.

Community Impact

We're proud to celebrate over 75 years of giving back to the community we serve by supporting efforts to improve the quality of life in our region. Two of the most prominent ways we do that is through:

Customer Experience Delivery:

- Provide a subsidized rate to households with <200% federal poverty level.

- Provide free energy efficiency and electrification education and solutions to qualifying households.
- Partner with a safety net of organizations to get the word out and increase our offerings.

Sustainable Communities:

- This community-focused program aligns with SMUD's core purpose and vision to enhance the quality of life for all our customers through innovative energy solutions. The program helps bring environmental equity and economic vitality to all communities in our service area, with special attention given to historically underserved neighborhoods.

2021 Accomplishments

In 2021 we continued to focus on reducing the bill burden of our customers most in need by:

- Providing 178 households with an energy bundle along with energy education.
- Electrifying four multi-family affordable housing complex with ~460 units.
- Completing 17 home rehabilitations including a combination of energy efficiency, weatherization and solar with our community partners.
- Collaborating with the Sacramento Metropolitan Air Quality Management District to provide 162 used electric vehicles through the Clean Cars 4 All Program.

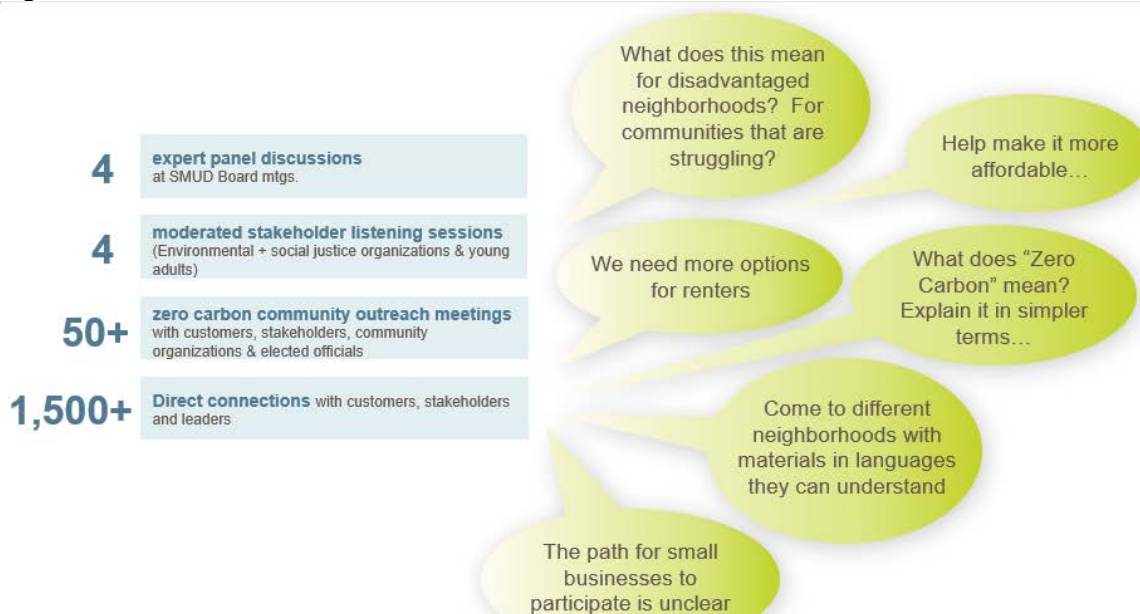
Our Sustainable Communities program continued to support community partnerships, with an enhanced focus on 2030 goals an alignment by:

- Funding a record 36 Shine Award projects in support of advancing social well-being, healthy environments, economic prosperity, mobility and clean energy with a focus on under resourced communities.
- Educating 16,000 residential, commercial and K-12 students about how the 2030 plan benefits our community and on technologies and SMUD programs that put them in control of their energy costs.
- Hosting over 50 commercial education workshops target zero carbon and energy efficient strategies.
- Creating 1,000 equitable and inclusive workforce training and employment opportunities in partnership with local CBOs to meet the 2030 Clean Energy job needs and enable diverse communities to participate in the clean energy economy.
- Funding the development of a e-mobility hub to serve our customers in under-resourced communities, while helping site two hub opportunities leveraging the data gathered from our Sustainable Communities Resources Priorities Map, our Customer Experience Delivery and IT teams.



- Launching of two community electrification education pilots in Oak Park and Curtis Park.
- Maintaining a community partnership network of over 135 neighborhood local organizations to ensure two-way communication about how to ensure the 2030 plan is inclusive.

We met with several external organizations in 2021 and moderated stakeholder listening sessions with specific groups to see gather feedback in response to our ZCP. During these listening sessions we heard some consistent themes as shown below:



Based on this feedback, we identified a clear need to develop a comprehensive Community Impact Plan that will guide SMUD's commitment to making a meaningful and impactful investment in under-resourced communities, while ensuring their participation in a clean energy future. This plan will leverage the strong relationships SMUD has built with its commercial, residential, and community-based customers and partners as a means of tailoring programs, messaging, and partnerships to meet the customers' where they are" as it relates to need for and execution of our 2030 Carbon Zero Plan. Having neighborhood-based ambassadors will help ensure that all communities are included in the zero-carbon economy.

We formed a multi-disciplinary team to develop the Community Impact plan in late 2021 and expect to have the plan finalized before the end of 2022.

2022 Priorities

The term "under-resourced" refers to a diverse group of customers with their own unique set of challenges and barriers to being an active participant in SMUD's ZCP. As residential customers, they include households with low/median income, minority communities and renters who face a variety of challenges around participating in a clean energy future – lack of income, high energy burdens, inadequate housing, cultural/language barriers. Additionally, under-

resourced communities are often more impacted by the negative environmental impacts associated with climate change, and further burdened by lack of substantial infrastructure, education and career training opportunities, and institutional presence needed to fully engage in the clean energy space.

Based on the community feedback received, it's clear that our recommendations need to align on along the issues that matter most to them: affordability, equitable access, and community engagement/education.

Traditionally, the benefits of and access to clean energy sources have not been equally shared. Higher income residential homeowners and businesses who own their properties with access to financing represent the majority of participants in energy efficiency and electrification programs.

The cost of investing in electrification technology represents an immense obstacle for under-resourced communities. Low-income households use more than twice the proportion of their total income on food, energy and household needs as high-income households. In short, if one can't afford to keep their lights on, they likely can't afford housing, let alone upgrades to their housing.

Furthermore, the poor structural condition of their property, limited access to financing, and the challenges posed by rental housing create additional barriers for under-resourced communities to participate in the benefits of a clean energy economy.

Compounding matters, under-resourced communities also lack equitable access to many other essential community components necessary to ensure a high quality of life, such as access to transportation, livable wage employment and training opportunities, economic development, education opportunities, digital access and a healthy environment.

With inflation increasing at its highest rate in over 30 years, and Sacramento now one of the least affordable housing markets in the nation, an even higher proportion of their income will go towards necessities further exacerbating the wealth gap that currently exists.

To address equitable access SMUD intends to:

- Invest in Sacramento's low-income housing stock with clean energy technology.
- Reduce cultural and language barriers to clean energy technology adoption.
- Build capacity of community-based organizations who can help magnify our reach and deliver services.
- Increase access to economically mobile careers and ensure that regional workforce development solutions are available to all our communities.
- Community Engagement/Education.

Given the community feedback and insights that were heard in the listening sessions, some customers do not understand what it means to be zero carbon, why it should matter to them

(personally) and how they can participate that specifies what actions can they do now (and in the future), given their unique income, housing and/or cultural challenges.

SMUD intends to address each of these areas through a combination of:

- Expanding current programs and services.
- Modifying/developing programs for customer segments that don't currently have programs tailored for them (including workforce development efforts).
- Investing in the support services (education, outreach, language translation services) that may be needed to be successful.

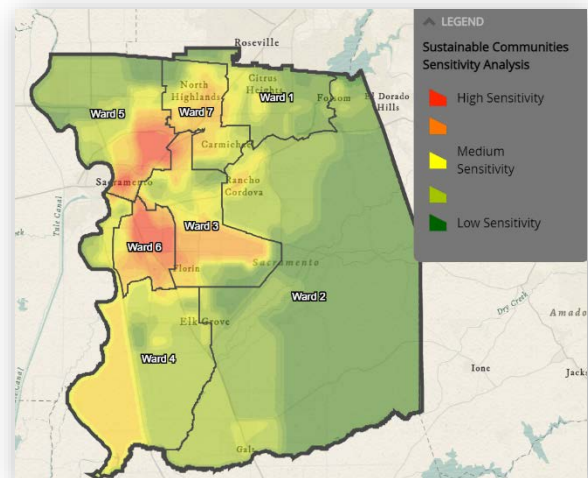
We are already starting to implement changes in how we operate our current programs based on the feedback from key stakeholders. For example, we've mapped every residential and commercial customer that are in the disadvantaged areas (as identified here)

For the 300 or so electrification projects we complete each year, we're in the process of narrowing down one community or neighborhood to electrify homes. Once we have selected a neighborhood, we will plan do the following:

- Electrify 200 to 300 homes in a concentrated area
- Identify neighborhoods most in need based on geography, age of home, energy burden, % of EAPR customers, etc.
- Engage the community to create support and recruit homeowners and property owners.
- Plan retrofits in clusters based on age and layout of home (for economies of scale).
- Assign contractors to perform direct installation of equipment.
- Educate the community on the many benefits, operation and long-term maintenance needs, and monitor energy use.

This community microtargeting based on need is extending to our community partnerships and sponsorships and program delivery. Through identifying grassroots local community champions through CBOs and neighborhood stakeholders, we will expand the capacity of existing aligned 2030 programs to meet the education and implementation needs of the 2030 plan. These partnerships will help us address the following priority initiatives:

- Equityfocused Autonomous Vehicle Racing Program- K-12 Title 1 school focused engineering program that provides both jobs for the instructors and green jobs training.
- Power Partners Program- Community electrification education pilot focused on peer to peer engagement and education.



- MBARK Partnership- Collaboration of local chambers focused on equitable adoption of clean technology in historically underserved communities.

As a result, many of our Community Sponsorships and Sustainable Community Partners for 2022 have specific goals and outcomes tied to 2030 Plan education and implementation. Finally, we are establishing a comprehensive language translation strategy to ensure that our existing and new programs and partnerships can be accessed by all of our customers.

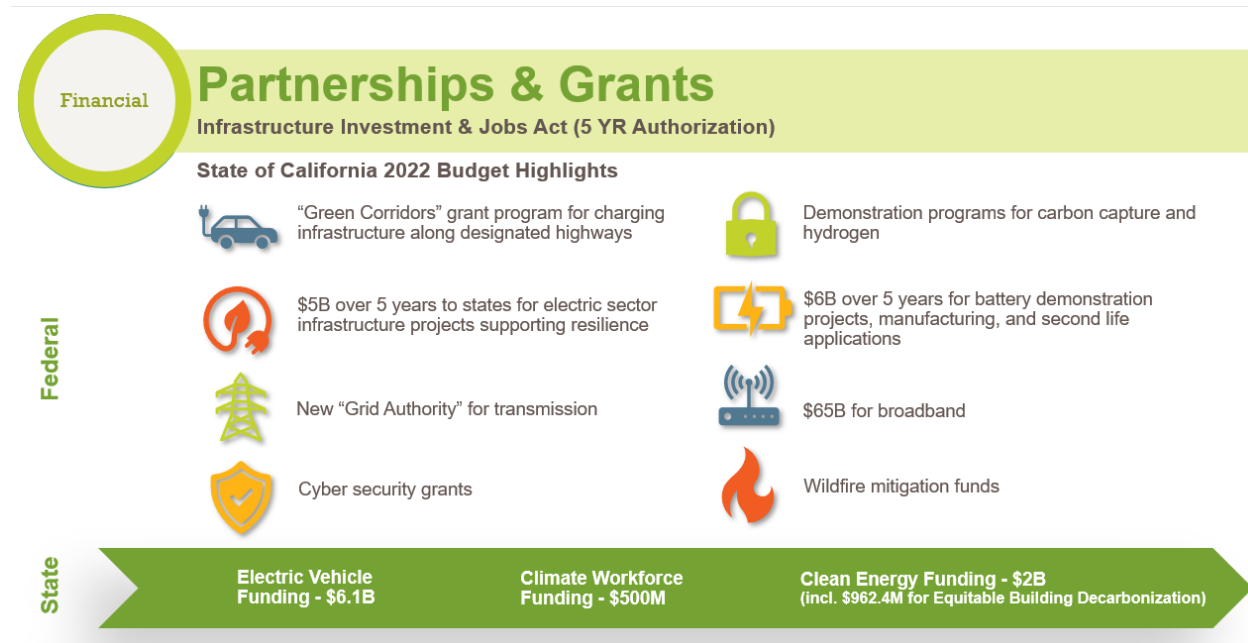
Financial

Financial Highlights

Soon after having the ZCP adopted by the Board, the first-rate cycle was completed and resulted in Board approved rate increases for 2022 and 2023 at or below Consumer Price Index (CPI), 1.5% in 2022 and 2% in 2023. Next year as we gather the information for the 2024 and 2025 rate case, the necessary rate increase levels will need to be considered, as inflation has risen sharply and affected many areas of our operations such as commodities, labor, supplies, and materials. In 2021, \$35 million was deferred as seed money to kick off projects that will help reach plan goals and help with rate pressure. Additionally in 2021, we capitalized on opportunities not directly aimed at the plan, but will help create some headroom, including a bond refunding that will save us \$3 million per year through 2028 and contributing additional pension funding to lower those ongoing costs into the future. The Finance team will continue to identify and execute on similar savings opportunities over the next few years, but also look at other ways such as renewable prepaids that can lower contracted PPA prices and other cost cutting measures all targeted at lowering the need for future rate increases.

The **Enterprise Prioritization** function was initiated last year through our reorganization and now as a formalized group looking at how we prioritize spending decisions across SMUD, which will be critical in meeting the goals of the plan and also seek to balance resource constraints and risks to the enterprise within the decision-making process. **Operational Excellence (OpEx)** program team and framework was also established. The OpEx team will be looking for sustainable operational savings and efficiencies that are needed while expanding organizational agility across SMUD. The identification, execution, and tracking of OpEx initiatives is now underway. The team will be working collaboratively with all Business Units along with Strategy, Prioritization, Innovation, Business Planning, and Enterprise Performance to maximize results and find ways to provide savings and work more efficiently. **Grants Capture and Strategy** was also formulated over this last year. It's an important part of helping us attain the financial wherewithal to accomplish our goal of zero carbon and stay within rate increases capped at or below CPI.

Partnerships & Grants



Pre-Capture Focus

In 2021, Government Affairs focused on grants "pre-capture," which refers to strategic relationship building, influence, and shaping of funding opportunities. We made significant strides at the Federal level. Highlights include meetings with the Biden Transition Team, FERC Commissioners, Pat Hoffman at DOE, Kelly Speakes-Backman at Department of Energy (DOE), the White House, DOE staff, Environmental Protection Agency (EPA) staff, and our delegation. The Federal Affairs team coordinated Paul Lau's testimony at the House Select Committee on the Climate Crisis, and at a FERC technical conference on the western interconnection, as well as Rachel Huang's testimony at a FERC technical conference on electrification. These efforts helped to introduce our 2030 ZCP to federal audiences. Recent recurring meetings with Rose Stephens-Booker, West Coast Regional Specialist for DOE's Office of Intergovernmental and External Affairs led to a SMUD visit from Energy Secretary Jennifer Granholm and provided SMUD with intelligence on DOE's priorities for energy-related grants. For instance, SMUD was strongly encouraged during recent meetings with DOE staff to provide formal comments responding to the agency's Requests for Information in program areas where SMUD eventually intends to apply for grant funding. Through pre-capture, SMUD aims to participate in development of grants ahead of their official release so that we are well-positioned to propose projects that match the agency's funding intent.

Grant Capture Outlook

Given our pre-capture efforts, we contracted with Momentum to help SMUD identify and screen grants while they concurrently support our regional partners with whom SMUD may be

collaborating on upcoming funding opportunities. SMUD screened 63 grant opportunities last year, 27 since Momentum came on board. In 2021, SMUD was awarded 4 grants, some of which were applied for in 2020, and those projects are underway – CEC Blueprints for M/HD ZEV Infrastructure; BESTFIT Innovative charging Solutions (twin rivers V2G); EV Ready Communities Blueprint (City of Sac); Hyblend Project (Hydrogen Blending Research). TWe also were awarded American Public Power Association's Demonstration of Energy & Efficiency Developments (APPA DEED) – Zero Energy Champions, which will help our youth in understanding their role in moving to a zero-carbon environment and for them to learn about zero carbon careers.

Partnership Development

We are working to lay the foundation and build the framework for a regional collaboration structure. For example, SMUD, Air Quality Management District (AQMD), Sacramento Area Council of Governments (SACOG) and Regional Transit (RT), the 4 Agency group, agreed on regional funding priorities for zero emission vehicle deployment. Additionally, SMUD has been engaged Sacramento County and the City of Sacramento on our federal and state grants strategy to build alignment with their government affairs efforts. We've also developed a 3-party building electrification Memorandum of Understanding (MOU) with the City and the County that demonstrates the mutual goal of regional collaboration. The MOU is designed such that any other City in Sacramento County can easily join so that we can show a broad regional coalition. Finally, we are following up with staff from the smaller cities in our service area (after our successful meetings with Paul Lau and our Board with Mayors and City Managers) to educate them about the ZCP, our priorities and to learn their priorities. These and similar relationships will likely form the source of partnerships SMUD will need to be competitive for grants.

SSS No.
BOD 2021-025

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date
ERCS 2022
Board Meeting Date
N/A

TO					TO				
1.	Frankie McDermott				6.				
2.	Stephen Clemons				7.				
3.	Brandy Bolden				8.				
4.	Lora Anguay				9.	Legal			
5.					10.	CEO & General Manager			

Consent Calendar		Yes	x	No <i>If no, schedule a dry run presentation.</i>	Budgeted		Yes		No <i>(If no, explain in Cost/Budgeted section.)</i>		
FROM (IPR) Gregg Fishman / Donna Lofton				DEPARTMENT Board Office					MAIL STOP B307	EXT. 5079	DATE SENT 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.
(Number & Title)

Benefits: Having an agendaized 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: Gregg Fishman, ERCS Committee Chair

Additional Links:

SUBJECT	Summary Of Committee Direction	ITEM NO. (FOR LEGAL USE ONLY)
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ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.