RESOLUTION NO.	

WHEREAS, on June 17, 2021, the Chief Executive Officer and General Manager released the "Chief Executive Officer & General Manager's Report and Recommendation on Rates and Services, *Volumes 1 and 2*" (the "CEO & GM Report"), which is incorporated by reference herein, the recommendation includes a new Solar and Storage Rate; and

WHEREAS, by Resolution 21-06-06, adopted June 17, 2021, a public hearing on the CEO & GM Report was scheduled for August 31, 2021, at 5:30 p.m.; and WHEREAS, notices of the hearing were duly published in the Sacramento Bee on June 22, June 25 and June 30, 2021; and

WHEREAS, pursuant to SMUD Ordinance No. 15-1, SMUD conducted the two required public workshops on July 8, 2021, and July 27, 2021, to receive and respond to customer comments and questions; and

WHEREAS, in compliance with Government Code section 54999, SMUD sent written notifications by certified mail on June 28, 2021, and June 29, 2021, describing the rate proposal to local school districts, county offices of education, community college districts, California State University, the University of California, and state agencies; and

WHEREAS, SMUD held two qualifying public workshops, contacted over 1,200 community organizations and neighborhood associations leaders via email, letter or phone call invitations to offer an in-person presentation, sent emails to over 256,000 customers and organizations with tailored content for each audience, conducted over 50 presentations to community neighborhood and business organizations, over 300

community and business partners were provided content and were asked to share information regarding the rate proposal with their members and networks, and an additional 55 local agency elected officials were sent information packets with an offer of in-person presentations, which resulted in 1 meeting being held and offers for follow-up meetings if desired; and

WHEREAS, SMUD provided all customers information about the rate proposal via email, mail newsletters, and through the rate change proposal website on smud.org, which received approximately 3,300-page views; and

WHEREAS, SMUD received from members of the public written questions, as well as comments and alternative recommendations to the rate changes proposed; and

WHEREAS, the public hearing was held on August 31, 2021, and out of an abundance of caution due to the ongoing COVID-19 health and safety precautions, the public hearing was conducted virtually on ZoomGov and livestreamed via Granicus and all interested persons were given an opportunity to comment and submit testimony; and

WHEREAS, pursuant to SMUD Ordinance No. 15-1, this resolution was introduced on August 31, 2021, by this Board to be circulated for a minimum of 10 calendar days for public review, input and comment; and

WHEREAS, the CEO & GM Report set forth in detail the factors necessitating the proposed rate action, including the need to meet SMUD's financial targets, address the cost shift from the existing Net Energy Metering (NEM) rate, and support the 2030 Zero Carbon Plan; and

WHEREAS, the 2030 Zero Carbon Plan was approved by the Board in April 2021, and sets an ambitious goal to reach zero carbon emissions in SMUD's power supply by 2030; and

WHEREAS, SMUD developed a public stakeholder process to design a Solar and Storage Rate that will result in a win-win solution for SMUD's customers, solar and storage industries and advocates, environmental advocates, and low-income advocates; and

WHEREAS, the public stakeholder process involved a Technical Working Group designed to receive input into the development of a value of behind the meter rooftop solar study; SMUD spent nearly four months with a Technical Working Group made up of a diverse range of stakeholders representing many views, including the solar industry, the environmental community, solar and non-solar customers, low-income advocates, academics and the utility solar industry; this Technical Working Group agreed on the key inputs for an independent study specific to SMUD's system and territory; and

WHEREAS, a Request for Proposal for an independent third party to determine the value of behind the meter rooftop solar using the values agreed upon by the Technical Working Group, resulted in the development of the Value of Solar and Solar + Storage Study (VOS Study) by Energy + Environmental Economics (E3); and

WHEREAS, a comprehensive independent VOS study was completed in September 2020 and made available to the public on www.smud.org, and the proposed solar and storage export rate reflects the value of solar, as reported in the study, which

includes transmission, distribution, generation capacity, energy, greenhouse gases and avoided land use; and

WHEREAS, the VOS Study valued solar at 7¢ per kilowatt hour (kWh) under the assumption that the energy produced from that solar replaces energy produced by a natural gas power plant in 2020, and 0.4¢ per kWh for indirect benefits of behind the meter rooftop solar; and

WHEREAS, over the past two years, SMUD has spent close to 1,000 hours working collaboratively with customers, stakeholders and the solar and storage industry to design a holistic, transformational and industry-leading rate proposal, and

WHEREAS, the 2030 Zero Carbon Plan calls for up to an additional 3,000 Megawatts (MW) of new renewable energy and storage to be added to SMUD's service territory by 2030; with rooftop solar paired with battery storage; and which will incentivize grid stability as SMUD transitions away from carbon-emitting power plants; and

WHEREAS, the netting concept in the current NEM1 rate means customers get less value if they install storage, which discourages the adoption of storage; as a result, only about 300 SMUD customers have installed storage since the inception of the current NEM1 rate; and

WHEREAS, storage technology is still developing, making the cost prohibitively expensive for most customers, and it is the intent of SMUD to transform the current solar only industry to a solar plus storage industry with the investment of \$25 million in battery incentives in combination with other supporting rates and programs to promote the adoption of rooftop paired with storage; and

WHEREAS, the recommendations in the CEO & GM Report include the implementation of a new Solar and Storage Rate, designed to encourage a transition from solar only to solar plus storage and more accurately compensate customers for the value of solar sent to the grid; and

WHEREAS, with the 2030 Zero Carbon Plan including up to 3,000 megawatts (MW) of renewable energy and storage in SMUD's service territory by 2030, this goal requires a significant increase in customers that adopt storage; and

WHEREAS, as of June 2021, SMUD had approximately 37,000 customers with solar, but only about 300 customers with storage; and

WHEREAS, SMUD proposes a Solar and Storage Rate for energy sold to SMUD – all customers selling any energy back to the grid will be paid 7.4¢ per kWh, regardless of time of day or season; and

WHEREAS, the recommendation in the CEO & GM Report includes allowing Solar and Storage Rate customers to size their system for future electrification with a new higher allowed system sizing of 110% of household usage; and

WHEREAS, the recommendations in the CEO & GM Report include adding the Summer Super Peak Demand Charge back into Rate Schedule NEM1 to reflect the postponement of the commercial rate restructure; and

WHEREAS, apart from the recommendations included in this rate action, SMUD is also implementing a one-time interconnection fee to pay for the costs of interconnecting solar and storage customers to SMUD's grid; the fees do not require a rate action for approval, and the amount of the fees will be posted on www.smud.org; and

WHEREAS, apart from the recommendations included in this rate action, SMUD has committed to invest \$25 million to implement incentives for battery program partnerships based on the size of the storage system and how that storage system is operated or controlled – by the customer or through a virtual power plant partnership; the details of the program(s) and amounts of incentives will be available on www.smud.org, these incentives do not require a rate action for approval and may be adjusted as necessary to assist SMUD in meeting the 2030 Zero Carbon Plan; and

WHEREAS, apart from the recommendations included in this rate action, SMUD is committed to bringing the benefits of solar to multi-family dwelling communities in historically under-resourced communities through a Virtual Solar program; the new Virtual Solar program would allow property owners of a qualifying multi-family affordable housing complex to install a solar generation system that allocates a portion of the financial benefit of the generation to each residential tenant, according to SMUD's Virtual Solar program policies; the development of SMUD programs do not require a rate action, and the details of the program will be available on www.smud.org; and

WHEREAS, programs and fees do not require Board approval and information on such programs and fees is provided for informational purposes only to describe the overall holistic rate package; and

WHEREAS, the recommendations in the CEO & GM Report, on balance, meet the competitive rate targets and the rate design metrics in Strategic Direction 2, Competitive Rates, and supports the 2030 Zero Carbon Plan; and

WHEREAS, the recommendations in the CEO & GM Report will ensure SMUD meets or exceeds the financial targets in Strategic Direction 3, Access to Credit Markets, and continues to meet the metrics and targets in the other Strategic Directions adopted by this Board, including those addressing reliability, customer relations, environmental leadership, and resource planning; and

WHEREAS, in light of the adoption of Proposition 26 on November 2, 2010, which precludes certain new fees, levies or charges but is not retroactive as to local governments, this Board desires to maintain certain pre-Proposition 26 rates; this Board understands that Proposition 26 does not vitiate legislation adopted prior to November 3, 2010, and any changes in rates since this date are cost-justified under the analysis in the respective Chief Executive Officer and General Manager's Report and Recommendation on Rates and Services that supported the adoption of the rates; and

WHEREAS, the lock-in for NEM customers that interconnect prior to January 1, 2022, complies with Proposition 26 because SMUD is permitted to reward investment in a solar demand management program designed to encourage conservation of traditional resources and increase supply for all customers, and the cost of such a program may be borne by all customers; state law also requires that SMUD displace its fossil fuel reliance, and compliance with this regulatory mandate is a cost of service that may be funded by all ratepayers; and

WHEREAS, the NEM rates were in place prior to the adoption of Proposition 26, and subsequent rate changes brought a subset of solar rates closer to the cost of service; therefore, NEM rates may be locked in as legacy rates under Proposition 26; and

WHEREAS, the VOS Study supports the Solar and Storage Rate export compensation rate, which complies with Proposition 26; and

WHEREAS, the export compensation rate will be adjusted every four years in response to future rate studies; however, these adjustments cannot increase or decrease the export compensation rate by more than 30% of the rate that applied during the previous four-year period; and

WHEREAS, the value of solar power is expected to decrease in the future, and the 30% cap on the export rate increases is not anticipated to impact export compensation; conversely, to the extent that the 30% cap on rate decreases benefits customers on the Solar and Storage Rate, this subsidy is justified by both increased supply available to all customers, and the regulatory mandate to displace fossil fuel reliance; and

WHEREAS, this Board has carefully considered the CEO & GM Report, public comment, input, and alternatives from community meetings, public rate workshops, the noticed public hearing, and comments received by mail, telephone and email; and

WHEREAS, this Board finds that the proposed action is reasonable and in the best interests of the public and SMUD's customers; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SACRAMENTO MUNICIPAL UTILITY DISTRICT:

Section 1. CHANGES TO RATE SCHEDULE NEM2:

a. Effective January 1, 2022, close and replace Rate Schedule NEM2
 with Rate Schedule SSR. All customers on Rate Schedule NEM2 as of December 31,
 2021, will be subject to Rate Schedule NEM1.

Section 2. CHANGES TO RATE SCHEDULE NEM1:

- a. Effective September 17, 2021, modify the first paragraph of Section
 VII of Rate Schedule NEM1 to reflect the residential rate requirement approved in
 Resolution 17-06-09 and to be on Rate Schedule R-TOD.
- b. Effective September 17, 2021, implement several minor language
 updates as specified in Rate Schedule NEM1.
- c. Effective September 17, 2021, Rate Schedule NEM1 will apply to customers that meet the following criteria:
- i. Moved in or established service prior to January 1, 2022;
 and
- ii. Application for interconnection approved by SMUD prior toJanuary 1, 2022.
- d. Effective September 17, 2021, modify Rate Schedule NEM1 as described in the following table:

Category	Moved in or established service prior to Jan. 1, 2022 AND Application for interconnection approved by SMUD prior to Jan. 1, 2022
On or before December 31, 2030	Customer is subject to NEM 1
After December 31, 2030	Customer is subject to the Solar and Storage Rate.

Move in/move out, Transfer of Service	 New customer at premises subject to Solar and Storage Rate. Customer subject to Solar and Storage Rate at new premises, if applicable.
System Modification/Replacement	 Subject to Solar and Storage Rate if: System size increased more than 10% of generating capacity originally approved, or 1 kW, whichever is greater, or exceeds 110% of generating capacity originally approved. Revised/new interconnection application for system replacement.
Storage Incentives	Customers are required to be on Solar and Storage Rate to receive storage incentives.
Transition to Solar and Storage Rate	• If a customer enrolls in the Solar and Storage Rate, they cannot return to Rate Schedule NEM1.
On or After January 1, 2022	Rate Schedule NEM1 is closed to new customers, except to those customers that are subject to Section II in Rate Schedule SSR.

e. Effective September 17, 2021, modify Rate Schedule NEM1 by
 adding "Summer Super Peak Demand Charge" to Section V, Subsection A.
 Revisions described above are detailed in the attached Rates, Rules and Regulations.

Section 3. SOLAR AND STORAGE RATE:

- a. Effective January 1, 2022, Rate Schedule SSR will apply to customers that meet the following criteria:
- i. Moved in or established service on or after January 1, 2022
 to a premises with an eligible generating facility; or
- ii. Have an eligible generating facility where the interconnection application was approved by SMUD on or after January 1, 2022.
- b. Effective January 1, 2022, create Rate Schedule SSR as describedin the following table:

Category	Moved in or established service on or after Jan. 1, 2022 OR Application for interconnection approved by SMUD on or after Jan. 1, 2022
System Size	• Cannot exceed 110% of customer's electrical usage.
System Modification/Replacement	Cannot exceed 110% of customer's electrical usage.
Export Compensation Rate	• \$0.0740 per kWh effective January 1, 2022.
Export Compensation Rate Updates	• SMUD will update the export compensation rate every four years, starting in 2026, using a combination of publicly available local indices and SMUD actual costs for components of the Export Compensation Rate. The Export Compensation Rate will not be changed more than ± 30% every four years. The revised value will be subject to Board approval at a regular Board meeting and will be posted on smud.org.
Solar and Storage Implementation Date	 January 1, 2022. In the event that the Solar and Storage Rate is unavailable January 1, 2022, customers will temporarily be subject to Rate Schedule NEM1 until it is technically feasible to transition them to the Solar and Storage Rate.
Electing the Solar and Storage Rate	 Customers with an eligible electrical generation facility on their premises may elect to enroll in the Solar and Storage Rate
Residential Rate Eligibility	 Standard residential rate (including the optional CPP Rate).
Annual Settlement	 No annual settlement. Export credit will roll forward to the next month.
Billing	 All customers will be billed monthly for all charges. The export credit can only offset electricity usage charges.
Storage Incentives	May accept storage incentives.

Storage Only

 Customers that have storage without an associated generating facility qualify for this tariff, regardless of date approved by SMUD.

Revisions described above are detailed in the attached Rates, Rules and Regulations.

Section 4. <u>MISCELLANEOUS CHANGES RELATED TO THE SOLAR</u> AND STORAGE RATE:

- a. Effective January 1, 2022, replace all references to Rate Schedule
 NEM2 with Rate Schedule SSR in Rate Schedules R and R-TOD.
- b. Effective January 1, 2022, update Section IV, Subsection F of Rate
 Schedule R as follows:

Customer Net Energy **Generation** Metering Option. Refer to Rate Schedules NEM1 and NEM2.

c. Effective January 1, 2022, update Section IV, Subsection E of RateSchedule R-TOD as follows:

Customer Net Energy **Generation** Metering Options. Refer to Rate Schedules NEM1 and NEM2SSR.

d. Effective January 1, 2022, update Section IV, Subsection B of RateSchedule AG as follows:

Customer Net Energy **Generation** Metering Options. Refer to Rate Schedules NEM1 and NEM2SSR.

e. Effective September 17, 2021, update Section V, Subsection E of
 Rate Schedules CI-TOD1, CI-TOD2, CI-TOD3 and CI-TOD4 as follows:

Customer Net Energy **Generation** Metering Options. Refer to Rate Schedules NEM1 and NEM2SSR.

Additions and revisions described above are detailed in the attached Rates, Rules and Regulations.

Section 5. ALTERNATIVE RECOMMENDATION 1: SMUD received feedback with the following list of policies several comments to ensure a strong customer-sited solar market: either create a glide path for the export rate, lengthen the adjustment period, increase the proposed export rate, tie exports rate to TOU periods, strengthen the proposed ESS [Energy Storage System] programs, and leverage solar installations to help SMUD meet other goals. or lock in the export rate for a certain amount of time.

This Board has considered the <u>list of policies_comments</u> in this alternative recommendation 1 and has determined not to adopt them for the following reasons:

 The 7.4¢ per kWh is supported by a comprehensive VOS study and reflects the reasonable cost of service. Including a glide path would pay a higher export compensation rate that exceeds the value of solar, resulting in an untenable cross-subsidy from non-solar/storage customers.

Section 6. ALTERNATIVE RECOMMENDATION 2: SMUD received several comments to extend the implementation date of the Solar and Storage Rate.

This Board has considered the comments in this alternative recommendation 2 and has determined not to adopt them for the following reasons:

 SMUD met the legal requirement of the original NEM law in 2017. As such, all customers who installed solar starting in 2018 could therefore be subject to a successor rate. The staff recommendation allows those customers to continue to receive NEM1 compensation through 2030. As the effective date of a successor rate has already been extended for 4 years while SMUD continued to offer NEM1 after 2017, the staff recommendation to implement the new Solar and Storage Rate on January 1, 2022, is reasonable.

Section 7. ALTERNATIVE RECOMMENDATION 3: SMUD received several comments to extend the time period that customers may continue to receive NEM1 benefits beyond 2030.

This Board has considered the comments in this alternative recommendation 3 and has determined not to adopt them for the following reasons:

• SMUD staff has determined that approximately 95% of customers who install solar in 2021 will have their solar systems paid back by the end of 2030. Additionally, for every year after 2030 that SMUD extends the NEM1 benefits, the cost shift to customers without solar increases by about \$10 million. SMUD must balance the benefit to our customers that have invested in solar along with those customers that have not.

Section 8. ALTERNATIVE RECOMMENDATION 4: SMUD received several comments to increase the export rate for excess generation and tie the export rate to the Time-of-Day time periods.

This Board has considered the comments in this alternative recommendation 4 and has determined not to adopt them for the following reasons:

- The 7.4¢ per kWh is supported by a comprehensive VOS study and reflects the reasonable cost of service.
- SMUD staff collaborated with the solar and storage industries to develop the new Solar and Storage Rate. The feedback received was to make the new Solar and Storage Rate as simple as possible for customers to understand. The 7.4¢ per kWh compensation rate achieves this goal. SMUD staff did complete an analysis on a TOD-based compensation structure, and the results showed only a minimal difference from the 7.4¢ per kWh compensation. The staff proposal follows the Board directive on rates simplicity. As such, the staff proposal complies with SD-2 on being simple and easy to understand approach compared to a more complex compensation mechanism.

Section 9. ALTERNATIVE RECOMMENDATION 5: SMUD received several comments to increase the battery incentives.

This Board has considered the comments in this alternative recommendation 5 and has determined not to adopt them for the following reasons:

Staff used a holistic approach to address the market transformation from solar only to solar plus storage with a combination of rates and supporting programs. The battery storage incentives are programs and therefore outside of the Board's decision-making in this rate process.

Programs will be implemented by staff and the intent is to allow flexibility and make adjustments to respond to demand, should the need arise.

 Staff recommends a holistic approach with the Solar and Storage Rate and supporting programs to help SMUD achieve its 2030 Zero Carbon Plan.

Section 10. ALTERNATIVE RECOMMENDATION 2ALTERNATIVE

RECOMMENDATION 6: SMUD received several comments to expand the Virtual Solar program to all multi-tenant properties.

This Board has considered the comments in this alternative recommendation 6 and has determined not to adopt them for the following reasons:

- The Virtual Solar Program is outside of the Board's decision-making in this rate process.
- Low-income customers have been largely left out in the adoption of rooftop solar. It has created a fairness and equity issue. Of our nearly 36,000 residential solar customers, only about 5% or 2,000 are on our low-income or Energy Assistance Program Rate (EAPR), and SMUD has helped pay to install some of those systems. Our first priority, as stated above, is to provide under resourced communities with access to solar. After we launch this program, we will look to see how we can further expand virtual solar without adding additional cost shift, but our first priority must be our under-resourced communities.

Section 11. ALTERNATIVE RECOMMENDATION 7: SMUD received several comments to provide more details on the Critical Peak Pricing (CPP) Rate.

This Board has considered the comments in this alternative recommendation 7 and is providing the following information as requested:

- Staff's proposal includes adequate detail to establish the CPP Rate on pages 43-46 of the CEO and GM Report.
- The prices for the CPP Rate will be included on the SMUD website to allow for flexibility in adjusting the rate to increase participation. The actual 2022 prices will be calculated at the end of 2021 based on market conditions at that time. Staff will then post the prices to the website.

Section 12. ALTERNATIVE RECOMMENDATION 8: SMUD received a recommendation that customers should not lose their NEM1 if they install a battery.

This Board has considered this alternative recommendation 8 and would like to clarify that the staff recommended proposal is consistent with this recommendation. Under the proposed Solar and Storage Rate, customers who currently receive NEM1 benefits will not lose those benefits if they install a battery. However, if a customer who currently receives NEM1 benefits chooses to accept a storage incentive for a battery, they will then be moved to the new Solar and Storage Rate.

Section 13. ALTERNATIVE RECOMMENDATION 9: SMUD received a recommendation to pay an export rate of 7.4¢ per kWh for system sizes up to 110% of household usage, and pay an export rate of cost of utility scale solar for systems sized 110-220% of household use.

This Board has considered this alternative recommendation 9 and has determined not to adopt it in this rate process because it will have significant implications to SMUD's billing system. SMUD may take this recommendation into further consideration in a future rate process if it can determine a reasonable solution.

Section 6. Section 14. ALTERNATIVE RECOMMENDATION 10:

SMUD received a recommendation to "clearly state in the SSR rate schedule, REC ownership and that a customer with such a facility shall transfer legal title for RECs at no cost to SMUD so other customers will not be burdened." Additionally, SMUD received a recommendation to remove the word "eligible for certification" from Section I of the Solar and Storage Rate tariff.

This Board has considered the list of policies in this alternative recommendation 210 and has determined not to adopt the recommendation for the following reasons:

- SMUD is not proposing to make any changes to our current policies in regards to REC treatment in this rate process.
- To be eligible for the Solar and Storage Rate, a customer must have
 an eligible renewable energy resource as defined by the CEC, but
 does not need to have it registered.
- The export rate under the SSR rate schedule does not include the value of RECs and customers retain ownership of the RECs.
- SMUD may adopt programs in the future that address REC ownership and the process of transferring ownership.

Section 7. Section 15. MODIFICATIONS: The Chief Executive Officer and General Manager, or his or her designee, is authorized to make non-substantive revisions to the Rates, Rules and Regulations.

Section 8. Section 16. ENVIRONMENTAL COMPLIANCE:

1.0 Section 21080(b)(8) of the California Public Resource Code and Section 15273 of the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq.) provide, in relevant part, that CEQA does not apply to the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, and other charges by public agencies which the public agency finds are for the purposes set forth in (A) through (D) below, and that a public agency shall incorporate written findings in the record in any proceeding in which an exemption is claimed setting forth with specificity the basis for the claim for exemption:

- (A) meeting operating expenses, including employee wage rates and fringe benefits,
- (B) purchasing or leasing supplies, equipment, or materials,
- (C) meeting financial reserve needs and requirements, or
- (D) obtaining funds for capital projects necessary to maintain service within existing service areas.

2.0 This Board finds and declares:

(A) That all revenue produced by each and every one of the rate actions set forth in this Resolution shall exclusively be used for purposes permitted by Sections 21080(b)(8)(A) through (D) of the California Public Resource Code, and that no amount of revenue obtained from this rate increase shall be used for any other purpose. Therefore, all of the foregoing rate actions are exempt from CEQA.



(C) The above findings are based on information set forth in the CEO & GM Report.

	Section 9. Section 17.	_The new and revised Rate Schedules and
Rules a	and Regulations referenced in th	nis Resolution are attached and incorporated
herein a	as Attachment	

Section 10. Section 18. To the extent there is a discrepancy between this Resolution and the new and revised Rate Schedules and Rules and Regulations attached hereto, the new and revised Rate Schedules and Rules and Regulations shall control.