



Addendum to the Chief Executive Officer and
General Manager's Report & Recommendation on

Rates and Services

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Powering forward. Together.



**Chief Executive Officer
& General Manager's Report
and Recommendation on**

Rates and Services

**Addendum 2 to Chief Executive Officer & General Manager's
Report and Recommendation on Rates and Services Dated
March 21, 2019.**

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Addendum 2 to Chief Executive Officer & General Manager's Report and Recommendation on Rates and Services, dated March 21, 2019

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Addendum 2

Overview

This document is Addendum 2 to the Chief Executive Officer & General Manager's Report and Recommendation on Rates and Services (Report) dated March 21, 2019, which modifies the Report's recommendations by:

- Withdrawing the Customer Renewable Self-Generation Grid Access Charge proposal, including the July 1, 2019 grandfathering deadline and the NEM 2.0 rate schedule. Proposing to launch a separate public stakeholder process in 2019 to examine net-energy metering (NEM) and other customer self-generation, and develop additional analysis addressing the costs, benefits and subsidies related to such systems.

The other proposals in the Report are still in effect and the established public workshops and public hearing schedule will continue as planned.

The following sections explain staff's proposed changes to SMUD Rates, Rules and Regulations.

Withdrawal of Customer Self-Generation Grid Access Charge

Staff's proposal for customer generation resources that interconnect to SMUD's distribution system included a Grid Access Charge. Staff has received public input and feedback on this item since the release of the Report and withdraws the proposal at this time to institute a more thorough public stakeholder process and develop additional studies and analysis in 2019. Staff seeks to further engage with solar customers, the solar industry and other representatives/groups, as well as its customers that do not have solar or other self-generation resources. Details about the public stakeholder process will be released in the coming months.

Following the stakeholder process and additional analysis, staff plans to issue a new Report and Recommendation regarding customer self-generation and appropriate assignment of costs and benefits.

Purpose

Net Energy Metering (NEM) Successor Rate

Staff's proposal for the NEM successor rate includes a Grid Access Charge for eligible renewable resources interconnecting to SMUD's distribution grid. This proposal includes a 20-year grandfathering provision for customers that received approval to interconnect systems prior to 2018, and a 10-year grandfathering provision for interconnection applications received on or before July 1, 2019. If a

customer did not submit a complete application by this date, the proposed Grid Access Charge would apply as early as January 1, 2020 and not later than May 31, 2020.

The overall input and feedback SMUD has received since release of the Report in March is that that solar customers and the solar industry oppose the proposed Grid Access Charge, and would like a more thorough public process to develop a successor NEM tariff.

Even though a withdrawal of the proposed Grid Access Charge will maintain the approximately \$30 million in cross subsidies between NEM and non-NEM customers, staff is withdrawing the proposal and launching a separate public stakeholder process later in 2019.

Rule and Regulation 21

The withdrawal of the Grid Access Charge also includes the proposed changes to Rule and Regulation 21 for those customers that have self-generation resources but do not enroll in SMUD's NEM rate. Accordingly, the Rule 21 section of the Report is withdrawn.

Revenue Impact

The objective of the original Staff recommendation to implement a Grid Access Charge based on non-bypassable cost components was to address the significant cost shift inherent in the NEM 1.0 program. Staff's proposal provided for full recovery of the avoided fixed costs for customers that are not grandfathered, to ensure the majority of SMUD customers do not continue to fully subsidize solar (and other self-generation) customers. By withdrawing the NEM 2.0 proposal, the cost shift from the majority of SMUD's customers to those customers with solar and other self-generation, will be approximately \$30 million in 2019 and is estimated to grow to approximately \$80 million annually by the late-2020s under the current NEM policy.

Staff's plan to issue a new proposal later this year will have a revenue impact depending on the level of reduction of the NEM 1.0 (and other customer self-generation) cost shift.

Recommendation

Staff withdraws the proposal for a customer self-generation Grid Access Charge. With the expectation of a future NEM2 Rate Schedule, staff recommends maintaining the proposal to rename the NEM rate schedule to Rate Schedule NEM1.

Revisions described above are detailed in Rate Schedules NEM1 and Rule 21 included in this Addendum. Additional miscellaneous revisions consistent with this Addendum 2 will be made to other Rate Schedules to remove references to the components of the Grid Access Charge proposal.

Appendix I

Amended Rate Schedules

Net Energy Metering Rate Schedule NEM1

I. Applicability

This Rate Schedule NEM1 applies to residential, commercial/industrial, and agricultural customers who have an electrical generation facility on their premise that is fueled by a renewable fuel source. A renewable electrical generation facility is a facility that is eligible for certification as a renewable energy resource as defined by the California Energy Resources Conservation and Development Commission (CEC).¹ These facilities include, but may not be limited to, generators fueled by:

- photovoltaic
- wind
- biomass
- solar thermal
- geothermal
- fuel cells using renewable fuels
- small hydroelectric
- digester gas
- municipal solid waste conversion
- landfill gas
- ocean wave
- ocean thermal
- tidal current

Small hydroelectric generation facilities will not qualify for this tariff if the facility will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. Fuel cells will not qualify for this tariff if the fuel cell derives any portion of its fuel from a nonrenewable fuel.

II. Generator Standby Charges

Customers who qualify for Net Energy Metering (NEM) are exempt from generator standby charges on that portion of their load that is served by the NEM eligible facility.

III. Conditions of Service

A. Eligibility

The following are requirements for eligibility under this rate schedule:

1. The facility must be located on the customer's premise; and
2. The facility must operate in parallel with SMUD's distribution facilities; and
3. The customer must meet all requirements of Rule and Regulation 21; and
4. The facility must be intended primarily to offset part or all of the customer's own electrical requirements; and
5. The facilities and the electrical requirements are located at a single and same metering point; and
6. The generating capacity can be a maximum of 3,000 kilowatts.

For photovoltaic generation facilities, generation capacity is measured using the California Energy Commission Alternating Current (CEC-AC) rating. For all other renewable electrical generation facilities, the nameplate Alternating Current (AC) rating will be used to measure generation capacity. This paragraph defining the measurement of capacity only pertains to the applicability of this rate schedule and may differ from any measurement of capacity used in Rule and Regulation 21.

¹ See the CEC's most current Renewable Portfolio Standard Eligibility Guidebook for the purposes of providing the technical definitions of a renewable electrical generation facility.

Net Energy Metering Rate Schedule NEM1

IV. Metering

A. Residential and Small Commercial ≤ 20 kW; Agricultural Customers ≤ 30 kW

SMUD will pay for and install, at no cost to the customer, a single meter capable of registering the flow of electricity in both directions, or an equivalent means of metering.

B. Large Commercial > 20 kW; Agricultural Customers > 30 kW

SMUD will pay for and install a single meter, or an equivalent means of metering, capable of registering the flow of electricity in both directions. New net-meter customers on GS-TOU1, GS-TOU2 or GS-TOU3 will be required to pay the cost differential between standard metering and bi-directional metering.

V. Payments

For the purposes of this schedule a “month” is considered to be a single billing period of 27 to 34 days.

- A. Charges for other than electricity usage must be paid monthly. This includes the System Infrastructure Fixed Charge, Maximum Demand Charge, Site Infrastructure Charge, Summer Super Peak Demand Charge, program fees, surcharges and taxes.
- B. Residential, Small Commercial and Agricultural customers, meeting the eligibility criteria as defined in Section III (A) of this sheet, may pay monthly or annually for the net electricity consumed.
- C. For all other customers, the net balance of all moneys owed must be paid each monthly billing cycle.
- D. If, in any regular billing month, the electricity supplied by SMUD is less than the electricity supplied to SMUD by the customer's eligible generation system, the customer will receive retail-valued electricity credits for the excess electricity supplied to SMUD. The retail-valued electricity credits will carry over to the following billing period until the end of the settlement period. Retail-valued electricity credits will only be credited against electricity usage charges.

VI. Settlement Method

All customers who qualify for the net metering option will have a 12-month settlement period. For existing systems the settlement period begins on the customer's move-in date. For new installations, the settlement period begins on the first day of operations after the customer has requested to be on the NEM rate and the NEM-eligible system is approved by SMUD for grid connection. At the end of the customer's 12-month settlement period, any unused accumulated monthly retail electricity credits may be zeroed out.

A. Annual Net Surplus Generation

1. At the end of a customer's 12-month settlement period, SMUD shall calculate the amount of net surplus generation over the 12-month period. If the customer has net surplus generation, SMUD will, at the customer's election, either:
 - Provide a monetary payment to the customer for the net surplus; or
 - Roll over the net annual surplus kWh into the next 12-month period.

Monetary value per kWh of net surplus generation shall be based on the most recently published SMUD budget, calculated as the dollar value of the expected avoided generation and production-related costs divided by the forecasted annual energy sales.

2. For each kWh purchased by SMUD under this annual net surplus generation method, the ownership of the associated renewable electricity credit will transfer from the customer to SMUD.
3. The net surplus monetary value shall be calculated annually.

Net Energy Metering Rate Schedule NEM1

4. This net surplus monetary value will remain in effect for the duration of the fiscal year used for the calculation of the customer's net surplus generation.
5. The value will be published on SMUD's website, www.smud.org, by December 20 prior to the year the value is in effect.

B. Opt-Out of Annual Net Surplus Generation

Customers may elect to opt out of receiving compensation or kWh roll-over credit for their net surplus generation over their 12-month settlement period. Customers who elect to opt out will not receive any form of compensation nor credit for net surplus generation delivered to SMUD. Such customers will be allowed to retain any associated renewable electricity credits produced by their net surplus generation.

VII. Successor NEM Program Rate

Residential customers who have an eligible renewable electrical generation facility on their premises that was approved by SMUD for installation on or after January 1, 2018 will be placed on the applicable standard R-TOD (Time of Day) Rate. All other components above of this NEM1 Rate Schedule apply to the successor NEM program rate.

All NEM residential, commercial/industrial, and agricultural customers who have an eligible renewable electrical generation facility on their premises that was approved by SMUD for installation on or after January 1, 2018 will be subject to any future NEM rates approved by the SMUD Board of Directors.

(End)

Successor Net Energy Metering Rate Schedule NEM2

I. Applicability

This Rate Schedule NEM2 applies to residential, commercial/industrial, and agricultural customers who establish service at a premises on or after January 1, 2018 or have an electrical generation facility on their premises that is fueled by a renewable fuel source which had an application for interconnection received by SMUD on or after January 1, 2018.

Customers who established service at their premises on or prior to January 1, 2018 and have an electrical generation facility on their premises that is fueled by a renewable fuel source which had an application for interconnection received by SMUD on or prior to January 1, 2018 are subject to Rate Schedule NEM1.

All customers that have an electrical generation facility on their premises that is fueled by a renewable fuel source that are not eligible for Rate Schedule NEM1 are subject to Rate Schedule NEM2.

A renewable electrical generation facility is a facility that is eligible for certification as a renewable energy resource as defined by the California Energy Resources Conservation and Development Commission (CEC).¹ These facilities include, but may not be limited to, generators fueled by:

- photovoltaic
- wind
- biomass
- solar thermal
- geothermal
- fuel cells using renewable fuels
- small hydroelectric
- digester gas
- municipal solid waste conversion
- landfill gas
- ocean wave
- ocean thermal
- tidal current

Small hydroelectric generation facilities will not qualify for this tariff if the facility will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. Fuel cells will not qualify for this tariff if the fuel cell derives any portion of its fuel from a nonrenewable fuel.

II. Successor Rate

This Rate Schedule NEM2 will be updated by SMUD Board of Directors action upon completion of a future public stakeholder process.

¹ See the CEC's most current Renewable Portfolio Standard Eligibility Guidebook for the purposes of providing the technical definitions of a renewable electrical generation facility.

Interconnection Requirements Rule and Regulation 21

I. Requirements

Rule and Regulation 21 sets forth the mandatory conditions and requirements for the interconnection and operation of distributed generation. All distributed generation connecting to the SMUD distribution system must comply with the mandatory conditions and requirements of Rule and Regulation 21, as further specified in SMUD Policy and Procedure 11-01. Interconnection is at SMUD's sole discretion and is prohibited until an approval to interconnect is provided by SMUD.

Requirements for interconnecting and operating distributed generation shall be available on the SMUD website (www.smud.org) and shall address, at a minimum, the following topics:

- Applicability
- Definitions
- General Rules, Rights, and Obligations
- Application and Interconnection Process
- Initial Review Process for Applications to Interconnect a Generating Facility
- Photovoltaic Interconnection Design Standards
- Generating Facility Design and Operating Requirements
- Maintenance and Permits
- Interconnection Facility and Distribution System Modifications and Costs
- Metering, Monitoring, and Telemetry
- Testing and Certification Criteria
- Interruptions or Reductions of Deliveries
- Access to Premises
- Indemnity and Liability By Customer
- Dispute Resolution Process

II. Self Generation

Rule and Regulation 21 will be updated by SMUD Board of Directors action upon completion of a future public stakeholder process.

III. Changes to Requirements

SMUD's General Manager and CEO is authorized to develop, implement, and revise as necessary interconnection requirements addressing the above topics and such additional provisions to respond to legislation, regulatory requirements, industry practice, operating requirements, or average service costs.

(End)

Net Energy Metering Rate Schedule NEM1

I. Applicability

This Rate Schedule NEM1 applies to residential, commercial/industrial, and agricultural customers who have an electrical generation facility on their premise that is fueled by a renewable fuel source. A renewable electrical generation facility is a facility that is eligible for certification as a renewable energy resource as defined by the California Energy Resources Conservation and Development Commission (CEC).¹ These facilities include, but may not be limited to, generators fueled by:

- photovoltaic
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Small hydroelectric generation facilities will not qualify for this tariff if the facility will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. Fuel cells will not qualify for this tariff if the fuel cell derives any portion of its fuel from a nonrenewable fuel.

II. Generator Standby Charges

Customers who qualify for Net Energy Metering (NEM) are exempt from generator standby charges on that portion of their load that is served by the NEM eligible facility.

III. Conditions of Service

A. Eligibility

The following are requirements for eligibility under this rate schedule:

1. The facility must be located on the customer's premise; and
2. The facility must operate in parallel with SMUD's distribution facilities; and
3. The customer must meet all requirements of Rule and Regulation 21; and
4. The facility must be intended primarily to offset part or all of the customer's own electrical requirements; and
5. The facilities and the electrical requirements are located at a single and same metering point; and
6. The generating capacity can be a maximum of 3,000 kilowatts.

For photovoltaic generation facilities, generation capacity is measured using the California Energy Commission Alternating Current (CEC-AC) rating. For all other renewable electrical generation facilities, the nameplate Alternating Current (AC) rating will be used to measure generation capacity. This paragraph defining the measurement of capacity only pertains to the applicability of this rate schedule and may differ from any measurement of capacity used in Rule and Regulation 21.

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- C. For all other customers, the net balance of all moneys owed must be paid each monthly billing cycle.
- D. If, in any regular billing month, the electricity supplied by SMUD is less than the electricity supplied to SMUD by the customer's eligible generation system, the customer will receive retail-valued electricity credits for the excess electricity supplied to SMUD. The retail-valued electricity credits will carry over to the following billing period until the end of the settlement period. Retail-valued electricity credits will only be credited against electricity usage charges.

VI. Settlement Method

All customers who qualify for the net metering option will have a 12-month settlement period. For existing systems the settlement period begins on the customer's move-in date. For new installations, the settlement period begins on the first day of operations after the customer has requested to be on the NEM rate and the NEM-eligible system is approved by SMUD for grid connection. At the end of the customer's 12-month settlement period, any unused accumulated monthly retail electricity credits may be zeroed out.

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1. At the end of a customer's 12-month settlement period, SMUD shall calculate the amount of net surplus generation over the 12-month period. If the customer has net surplus generation, SMUD will, at the customer's election, either:
 - Provide a monetary payment to the customer for the net surplus; or
 - Roll over the net annual surplus kWh into the next 12-month period.

Monetary value per kWh of net surplus generation shall be based on the most recently published SMUD budget, calculated as the dollar value of the expected avoided generation and production-related costs divided by the forecasted annual energy sales.

2. For each kWh purchased by SMUD under this annual net surplus generation method, the ownership of the associated renewable electricity credit will transfer from the customer to SMUD.
3. The net surplus monetary value shall be calculated annually.
4. This net surplus monetary value will remain in effect for the duration of the fiscal year used for the calculation of the customer's net surplus generation.

Net Energy Metering Rate Schedule NEM1

5. The value will be published on SMUD's website, www.smud.org, by December 20 prior to the year the value is in effect.

B. Opt-Out of Annual Net Surplus Generation

Customers may elect to opt out of receiving compensation or kWh roll-over credit for their net surplus generation over their 12-month settlement period. Customers who elect to opt out will not receive any form of compensation nor credit for net surplus generation delivered to SMUD. Such customers will be allowed to retain any associated renewable electricity credits produced by their net surplus generation.

VII. Successor NEM Program Rate

Residential customers who have an eligible renewable electrical generation facility on their premises that was approved by SMUD for installation on or after January 1, 2018 will be placed on the applicable standard R-TOD (Time of Day) Rate. All other components above of this NEM1 Rate Schedule apply to the successor NEM program rate.

All NEM residential, commercial/industrial, and agricultural customers who have an eligible renewable electrical generation facility on their premises that was approved by SMUD for installation on or after January 1, 2018 will be subject to any future NEM rates approved by the SMUD Board of Directors.

(End)