
General Manager's Report and Recommendation on

Rates and Services

March 31, 2009

a Sacramento Municipal Utility District Publication

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Contents

Rate Requirements and Recommendations	1
Background	1
General Manager's Recommendation	2
Need for a Rate Increase	3
Competitiveness and Equity Using Cost of Service	7
Workshops	11
Changes to Existing Rates	13
Overview	13
1. Residential	16
2. Small Commercial (0 to 299 kW)	18
3. Small Commercial TOU (300 to 499 kW)	18
4. Medium Commercial TOU (500 to 999 kW)	19
5. Large Commercial/Industrial TOU (1 MW and Greater)	20
6. Agricultural	21
7. Street, Traffic, and Security Lights	21
8. Miscellaneous Charges and Fees	22
9. SLS and NLGT Rate Schedule Restructuring	23
10. Energy Assistance Program (EAPR)	25
11. Medical Equipment Discount (MED) Rate	27
12. Establish a Feed-In Tariff for Distributed Generation	32
13. Electric Vehicle Rates	34
14. Net Metering Interconnection Agreements	35
15. Residential Electric Space Heat Tier Allowances	36
16. Solar Surcharge for SB 1	37
17. Reset of Demand for Commercial Solar/Photovoltaic Installations	37
18. Eliminate Optional Metered Standby Service Charge	38
Bill Impacts	41
Overview	41
Changes to Rules and Regulations	45
Overview	45
19. Rule and Regulation 21 Customer-Owned Generation	45
Detail of Rate Changes	49
September 1, 2009	49
January 1, 2011	54
Information on District Performance	59
Environmental Assessment	65
Energy Conservation Tips and Links	69
Programs and Links	70

Strategic Directives	73
Glossary of Terms	79
Appendix A	83
Appendix B	85
Appendix C	87
Audited Financial Statements	89
Unaudited Financial Statistics	91

Rate Requirements and Recommendations

Background

SMUD last reviewed its general rate levels in the first quarter of 2007. The rates currently in effect are based on assumptions about the economy and fuel price levels made at the end of 2006. Since then, the adverse economy has significantly lowered sales, lowered interest earnings on fund balances, increased financing costs and impacted customers' ability to pay for service. Moreover, state and federal mandates related to grid reliability and environmental goals have added new costs. In addition, both 2007 and 2008 were dry weather years, which reduced hydroelectric energy production. The trend for 2009 is also dry. As a result, financial performance for 2007 and 2008 was less than staff's target to maintain superior credit ratings over the long run.

SMUD had anticipated that the current rates would provide sufficient revenue through the end of 2009. However, factoring in the effects of the current economic conditions resulted in an \$87 million shortfall in the 2009 budget. Cost reductions and a one-time addition to revenue trimmed the shortfall to \$27.7 million, which, absent additional cuts or revenue, will be covered by SMUD's Rate Stabilization Fund (RSF). At the beginning of 2008, this fund had a balance of \$91 million. Sixteen million was used in 2008 to purchase replacement power due to lower generation at SMUD's hydro units. An additional allocation has been made from this fund, of up to \$35 million, to cover 2009 energy shortfalls due to lower production of energy from SMUD and Western Area Power Administration hydro facilities. The current uncommitted Rate Stabilization Fund balance is just over \$12 million. Without additional revenues, SMUD would end 2009 with little or no money left in the RSF, leaving no funds for unexpected events going forward. Many of the issues impacting 2009 are expected to continue into 2010 and 2011. This report describes those challenges and outlines the actions recommended to maintain the District's "A/A+" bond rating.

It is critical for SMUD to maintain its bond ratings. Recent disruptions in the credit markets have greatly increased the penalty for lower credit ratings at a time when SMUD needs to increase borrowing to support critical new infrastructure projects.

For SMUD to continue modernizing its system, improve service capabilities and invest more in renewable generation resources, it must maintain healthy cash flow levels. The measure of cash flow is an important tool used by bond rating agencies. A healthy cash flow will help keep the investment community confident that SMUD is a solid organization with good financial management and a good organization in which to invest.

The rate increases recommended in this report, along with additional targeted cost reduction measures, are designed to maintain SMUD's ability to access credit markets at competitive rates for the capital needed to keep SMUD one of the leading utilities in the United States and ultimately benefit customers by reducing capital costs.

General Manager's Recommendation

The General Manager recommends a two-step increase in rates that, when combined with reductions in operating cost levels, will:

- Cover the 2009 budget shortfall; and
- Increase cash flows to a level necessary to maintain SMUD's single "A" bond rating in 2010 and 2011.

The first step, a 9.5 percent increase on September 1, 2009, would cover the 2009 budget shortfall and raise the fixed charge coverage level (a measure of cash flow) to 1.4 times debt service payments. This fixed charge coverage is in the middle of SMUD's target range of 1.3 to 1.5 times debt service payments. The second step, a 3.5 percent increase on January 1, 2011, would raise the fixed charge coverage to 1.5 times earnings at the top of the target range.

The General Manager is also recommending changes to the medical equipment discount (MED) rate and the residential rate structure. The proposed MED modification will change the structure of the discount so it more closely matches the electric consumption of the qualified medical device.

Two changes are proposed for the residential rate class. The service charge would be increased from \$5.00 to \$7.00 per month to more closely match the costs that do not depend on the amount of energy used by the customer (meters, billing, service drops and customer call center). In addition, the second and third energy tiers would be combined to simplify the rate structure and make it easier to transition to new rate options that will be proposed after new meters are installed in 2011. These recommendations:

- Maintain the Board's core value of allocating costs equitably across and within classes and will maintain system average rates at least 10 percent lower than PG&E's rates.
- Ensure that the rates will remain competitive for each rate class.
- Provide SMUD with the revenue levels to meet solar, energy efficiency and renewable energy goals as prescribed by the Legislature and Board policy.
- Meet SMUD's financial targets.
- Meet the Board's customer relations and reliability targets while making funds available to increase efforts to support system upgrades and preventive and corrective maintenance of aging infrastructure, which is critical to the safe and reliable operation of the transmission and distribution systems.
- Provide SMUD with the resources to continue to invest in the processes necessary to maintain a high level of customer satisfaction and confidence.

In keeping with SMUD's commitment to its customers, the environment and regulatory requirements, the General Manager further recommends the adoption of a Feed-in-Tariff (FIT) to compensate customers for excess generation from qualifying distributed generation.

Need for a Rate Increase

The need for the rate increase is driven by three primary factors: the economy, increased regulation around climate change and reliability, and market impacts on commodity costs. Staff has offset these cost increases through a cut of \$20 million per year in operating costs, additional savings of \$20 million to be achieved over the next two years, and \$20 million per year from refunding a portion of SMUD's debt.

Impact of the Economy

Sales

The slowdown in residential and commercial building construction due to the current recession has had a major impact on SMUD. Customer counts from 2007 through 2008 were flat, and little growth is expected for 2009 and into 2010. The forecast for 2009 also shows a drop in revenue as investment in energy efficiency decreases average use per customer.

Moreover, trouble spots for the economy in the Sacramento region are now beyond the housing and construction markets. The number of jobs in the retail and hospitality sectors, as well as professional and business services, has been shrinking.

The downturn of the economy is affecting SMUD in a variety of ways. Primarily, sales are much lower than what was anticipated in late 2006, and sales levels in 2009 are now projected to be about \$90 million lower. In addition, many SMUD customers are taking longer to pay their monthly bills. More customers have fallen behind and more are paying on installment plans to catch up. In December 2008, SMUD had 34,827 accounts eligible for disconnection compared with 18,620 in 2007.

Residential and commercial accounts combined had past-due balances of \$21.6 million at the end of December, up from \$19.2 million a year earlier.

Credit Markets

Disruption in the credit markets has increased SMUD's borrowing costs on some of its existing debts while lowering interest earned on invested funds. Interest rate spreads between credit ratings are wider than in the past. This rate differential has significant impacts on interest rates on new bonds issued by SMUD.

SMUD's creditworthiness is of even greater importance during this time of financial uncertainty, and any slip in credit rating could cost SMUD millions of dollars in additional financing costs. SMUD has major capital projects on the horizon that will require financing, including Advanced Metering Infrastructure (AMI), a new corporate yard that could bring hundreds of construction jobs to the Sacramento area, and Solano Wind Generation Phase 3.

Energy Assistance

Enrollment in the discount rate program for low-income customers has risen sharply in the last two years. SMUD expects to have 74,000 customers enrolled by year end, compared with approximately 58,000 customers at the end of 2007. SMUD has made it easier to sign up for the Energy Assistance Program (EAPR) and has stepped up outreach efforts to make customers aware of the program. In addition, more customers became eligible for the program with an increase in the income ceiling last year. Although the extent to which the economy has impacted Energy Assistance Program customers is not specifically quantifiable, it is a likely contributor to the significant increase in customer enrollments over last year.

Regulatory Environment

State Climate Plan

The California Air Resources Board prepared the *Climate Change Draft Scoping Plan*, which describes a combination of programs and policies the state may use to reduce greenhouse gas emissions (GHG) to 1990 levels by the year 2020. These emission reductions are mandated by Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006.

While electric utilities account for approximately 23 percent of California's current GHG emissions, the draft scoping plan would hold the electricity sector responsible for up to 40 percent of total emission reductions; that is, SMUD and other utilities would have to reduce their emissions by up to 40 percent compared to "business as usual" projections. SMUD has increased funding levels for energy efficiency programs and increased renewable energy goals, both of which are essential for reaching state targets.

The District has long been committed to complying with all applicable environmental laws and standards; conserving resources, preventing pollution, recycling and minimizing waste. Funding for energy efficiency programs is now critical to meet the District's energy efficiency goals and the state's goals within Assembly Bill 2021 (AB 2021), which sets energy efficiency standards for all utilities.

By 2050, under AB 32, carbon emissions must be reduced to 80 percent below 1990 levels. SMUD has established a more aggressive goal to reduce carbon emissions – currently about 3 million metric tons a year – to less than 350,000 metric tons a year by 2050, "while assuring reliability of the (electrical) system; minimizing environmental impacts on land, habitat, water quality and air quality; and maintaining a competitive position relative to other California electricity providers." (See Strategic Directives section of this report; Strategic Directive 9 (SD-9).)

As part of the effort to reduce carbon emissions, the Board set higher goals for renewable energy, aiming for renewables to account for 33 percent of SMUD's power supply by 2020. This reduction is in line with a gubernatorial mandate, pending legislation for accelerating California's Renewable Portfolio Standard (RPS), and regulators' plans for implementing AB 32, California's groundbreaking global warming law. The recommendations in this report support all of these goals.

Rising Cost of Renewables

While SMUD was the first California utility to set aggressive goals for renewable power, the state is requiring investor-owned utilities to expand their portfolios. Against this backdrop, competition for limited supplies has intensified and the market cost of renewables has risen steadily.

Two of SMUD's existing lower-cost purchase agreements for renewable power will expire in 2010 and 2011. In addition to the highly competitive markets for renewable power, all utilities are constrained by limited transmission capacity for moving new sources of renewable energy from remote generation areas to population centers.

A new obstacle for SMUD is that the planned Phase 3 development at its Solano Wind Project near Rio Vista — one of the least cost alternatives — seems likely to be delayed by Travis Air Force Base in Fairfield. The Air Force has put on hold all new development of wind power in the Montezuma Hills. The Air Force wants to ensure that the wind turbines do not adversely affect a new radar installation scheduled to be commissioned in early 2009. Staff is working with the Air Force to mitigate the effects of wind turbine operation on the new radar. Phase 3 would give SMUD another 125 to 130 MW of wind-generation capacity. The expansion was scheduled for completion by spring 2011; however, now it appears likely the expansion will not be finished until 2012. In the meantime, other projects have been contracted to fill the gap.

UARP License Renewal

In 2007, SMUD agreed with various agencies and stakeholders to revised conditions for a new federal license to operate the Upper American River Project (UARP) hydroelectric system. It was the culmination of an extraordinarily complicated, five-year process including federal, state and local agencies and various other stakeholders.

The agreement allows SMUD to maintain power generation at an acceptable level and to satisfy other stakeholders' requirements for increased stream flows. SMUD estimates it will lose on average 7.5 percent of annual generation from the UARP because more water will be diverted around powerhouses.

Under the agreement, SMUD is also committing to millions of dollars in improvements and additions to recreation facilities around the major reservoirs in Crystal Basin and will guarantee water releases for whitewater boating. In total, the settlement agreement is expected to cost SMUD about \$15 million a year, most of which will go to enhancing recreation opportunities and buying power to replace lost generation. SMUD included about half of these costs in the last rate proceeding as the effective date of the new conditions had been expected to be in 2009.

Increase in Regulatory Costs

On August 14, 2003, North America experienced its worst blackout ever, as 50 million people in the Northeastern and Midwestern U.S. and Canada lost power. The event prompted U.S. legislators to make Utility Reliability Standards mandatory via the Energy Policy Act of 2005. The first of these standards became effective and enforceable to SMUD in June 2007. If SMUD fails to comply with any requirement in each mandatory standard, SMUD can be fined in a range from \$10,000 per incident to as much as \$1 million a day per violation, depending on the level or severity. While SMUD has always maintained strict reliability standards, the costs associated with the new standards are significant and have increased more than expected. SMUD also sees additional costs on the horizon related to the California ISO's new market design.

Market Impacts on Commodity Costs

Although prices have come down in the last six months, SMUD's "dollar cost averages" and contracts signed between January and July of 2008 increased the average portfolio cost of SMUD's natural gas for generation in 2010 and 2011. In addition, Western Area Power, which provides SMUD just under 900,000 MWh per year of hydro power, as a result of the three-year drought will be rebuilding water storage levels and expects to deliver less energy through 2011. This energy will be replaced from the market.

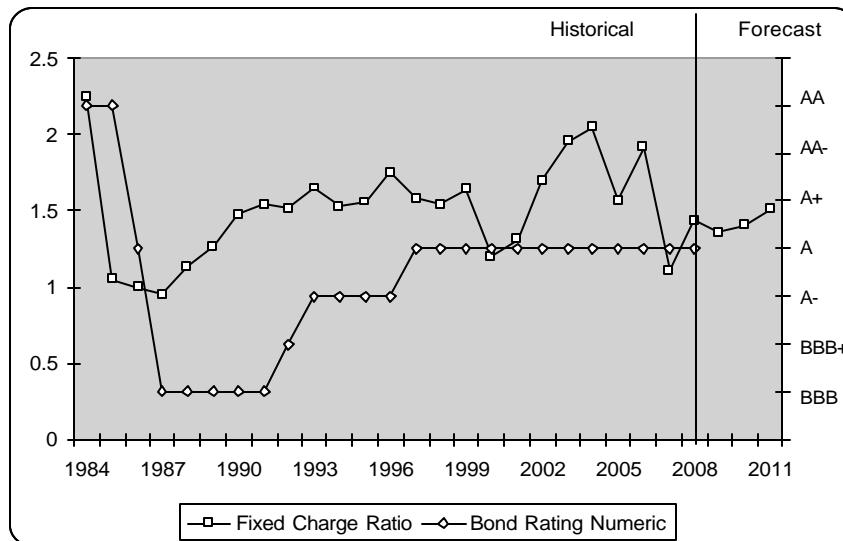
Equipment and Facilities Replacement Costs

Strategic Directive 4 (SD-4) documents the District’s commitment to reliability and maintenance of equipment. SMUD recognizes the challenges of an aging infrastructure. Many District transmission and distribution facilities are 40 to 60 years old. As a result, there is a need to replace and update system facilities. Some of the major projects include investing in “smart grid” technologies, increasing the program to replace underground cable, upgrading the corporate yard to support field operations, systematically replacing the equipment at large substations, and securing inventories for transformers that have long lead times for replacement in the event of equipment failure.

Maintaining Sources of Low-Cost Funds

Like most public power utilities, SMUD relies on the use of borrowed funds to pay for a portion of its capital projects on an ongoing basis. In order to ensure continued access to funding at reasonable rates, it is important that SMUD maintain strong credit ratings. This is particularly critical in the current environment, given the ongoing financial crisis, which has caused investors to focus more keenly than ever on credit quality. Investor concerns have driven credit spreads (the difference in borrowing costs for highly rated entities relative to those with lower credit ratings) to some of their widest margins in history, making poor credit more costly than ever.

One of the key indicators used by the rating agencies to measure financial strength is the fixed charge ratio or fixed charge coverage (a measure of how much cash flow SMUD has available to make its debt service payments and other fixed obligations). While this is not the only measure used by rating agencies, it has good correlation with the credit rating over the long term. The following graph shows the historic relationship between the District’s fixed charge ratio and Standard and Poor’s credit rating for the District.



The graph includes forecasted results for 2009, 2010 and 2011, which incorporate the impact of a 9.5 percent rate increase on September 1, 2009, and a 3.5 percent increase on January 1, 2011. The 2007 results reflect the impact of poor hydro output. Keeping the fixed charge ratio between 1.3 and 1.5 is a goal of the Board and is important in retaining the District’s current bond rating. Without a rate increase, the fixed charge ratio would drop below 0.9 in 2010 and 2011, lower than the period in the mid 1980s when the District’s credit was downgraded to BBB, and 2001 when the rating agencies changed their outlook on SMUD from positive to neutral. Failure to achieve the targeted

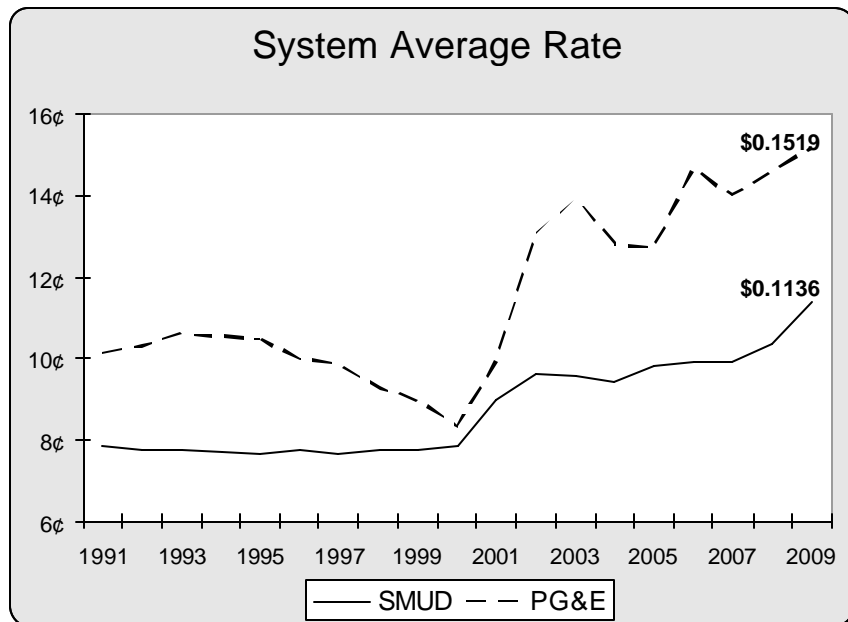
fixed charge coverage levels would likely lead the rating agencies to reassess the District's credit ratings.

With the pressure on credit spreads explained earlier, a lowering of credit ratings would be very costly. SMUD forecasts borrowing up to \$375 million over the next two years for capital projects. A ratings drop from A to BBB would, at best, add an additional interest cost of \$135 million over the life of the bonds at current credit spreads. At worst, SMUD may not be able to raise new capital. The proposed rate adjustments would provide additional revenue needed to maintain a secure financial position and healthy bond ratings.

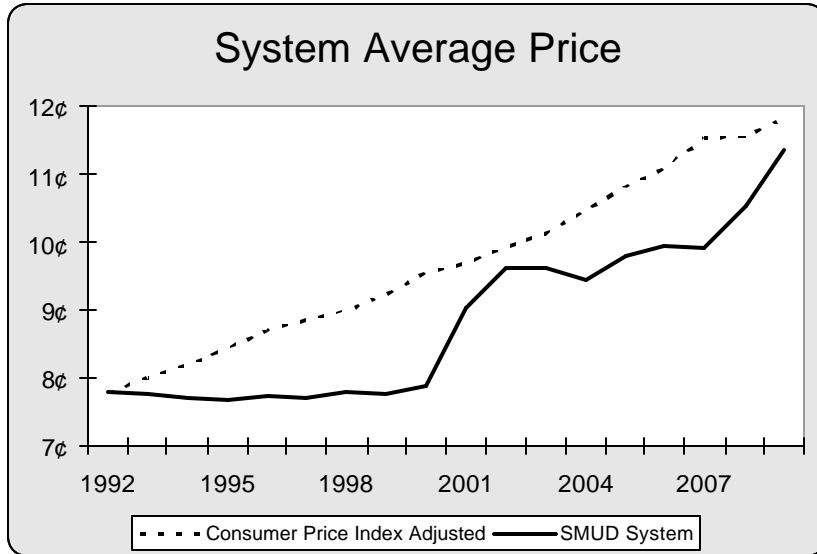
Competitiveness and Equity Using Cost of Service

Competitiveness

In the late 1990s during early stages of electric utility deregulation, PG&E lowered rates twice due to state-ordered reductions for residential and small commercial customers. PG&E has raised rates 75 percent since 2001. SMUD increased rates in this same period by 32 percent. Currently, SMUD's system average rate is 31 percent lower than PG&E, and after the proposed rate increases, rates will remain at least 25 percent lower than PG&E. SMUD's current rates on a class basis range from 27 percent (large industrial rates) to 41 percent (lighting rates) below PG&E.



Even after a 9.5 percent rate increase, SMUD's rates will meet the Board's metric for competitive system rates that are 10 percent below PG&E for every rate class.



Essentially, SMUD's rates have been 10 percent below the rate of inflation. On average (assuming 750 kWh per month), residential customers currently spend \$77.88 per month for electric service.

System Average Rate

SMUD's rates are significantly lower than the rates for investor-owned utilities within California and lower than many municipals.

The following table shows SMUD's actual 2008 system average rate compared with other California utilities as reported by the utilities for that year.

2008 System Average Rates	
Utility	\$/ kWh
SDG&E*	\$0.1594
Glendale*	\$0.1536
PG&E*	\$0.1499
Pasadena	\$0.1390
SCE*	\$0.1370
Riverside	\$0.1271
Alameda	\$0.1260
MID (Modesto) *	\$0.1141
LADWP*	\$0.1139
Anaheim	\$0.1105
SMUD	\$0.1050
TID (Turlock)*	\$0.0974
Roseville*	\$0.0970
Palo Alto*	\$0.0959

Utilities marked with an asterisk in this table have either been approved for one or more rate increases in 2009 or have a rate action pending approval.

For 2009, SMUD is forecasting a system average rate of \$0.1039 per kWh. Under this proposal, on September 1, 2009, the average system rates would increase 9.5 percent from \$0.1039 to \$0.1136 per kWh.

Cost of Service

The *2009 Rate Costing Study*¹ serves as the underlying tool for evaluating equity between classes. This analysis provides a measure of how well SMUD is doing relative to the Board's core value of allocating costs equitably across classes. The results of the 2009 cost study are reflected in the following table.

Since forecast revenue recovery costs are associated with all components of delivering power to our customers, the 9.5 percent increase needed from each class of customers will be collected through all components, including demand and customer charges. The new relative recovery including the recommended 9.5 percent increase, the restructured residential tiers and residential \$7 service charge are incorporated here.

<i>Cost of Service</i>	<i>Current Revenue (Millions)</i>	<i>Previous Relative Recovery (2007)</i>	<i>New* Relative Recovery After 9.5% Increase</i>	<i>% Below PG&E After Increase</i>
Residential	\$562	95%	94%	27.0%
0-20 kW	\$85	81%	80%	28.0%
21-299 kW	\$246	115%	115%	25.8%
300-499 kW	\$88	117%	121%	29.7%
500-999 kW	\$91	105%	110%	24.7%
1000+ kW	\$173	102%	105%	19.4%
Agricultural	\$7	79%	76%	20.4%
Lighting	\$9	67%	75%	35.0%
Total (System)	\$1,260	100%	100%	25.2%

* includes the recommended 9.5% increase, restructured residential tiers and residential \$7 service charge.

The relative recoveries for 2011 won't be significantly different since the 3.5% increase applies to all bill components.

¹ The *2009 Rate Costing Study* is available by contacting the District's pricing area at (916) 732-6222.

Workshops

The District will hold two qualifying Public Rate Workshops at the SMUD campus to provide complete information on the proposed rate changes. The workshops will:

- Present an opportunity to join your Board representative and District executives in a discussion of utility-related issues.
- Provide a forum to present proposed rates.
- Invite public input and response to questions on the proposed changes.
- Distribute fact sheets describing expected impacts to individual consumer classes.
- Inform customers about ways they can conserve energy to help mitigate rate increases.

Workshops and Public Hearing Schedule

Date & Time	Location	Address
Thursday, April 23, 2009 6:00 p.m.	<i>Workshop</i> SMUD Headquarters Conference Center	6201 S Street, Sacramento
Wednesday, May 13, 2009 9:00 a.m.	<i>Workshop</i> SMUD Headquarters Conference Center	6201 S Street, Sacramento
Thursday, June 4, 2009 6:00 p.m.	<i>Public Hearing</i> SMUD Auditorium	6201 S Street Sacramento

While the workshops are designed to specifically meet process requirements, staff is prepared to hear your input and respond to questions at either the community meetings or the workshops.

Community Participation

To participate in the rate process, the community meetings and workshops are open to the public and facilitate feedback for the District's Board of Directors. The public hearing also provides the opportunity for public input. In the meantime, if you have specific questions about a recommendation or the rate process, please direct questions to Rob Landon, Rates Administrator, at (916) 732-6222.

Changes to Existing Rates

Overview

This section presents the proposed rate revisions for 2009 to the Board of Directors, our customer-owners, and the interested public. Detailed recommendations for rates are followed by recommended changes to rules and regulations.

The following table summarizes the recommended 9.5 percent and 3.5 percent revenue increases by rate class.

Rate Increase - Staff Recommendation **						
Customer Class	Current Revenue Forecast (millions)	2009 Annual Revenue Increase @9.5% (millions)	2009 & 2010 Impact (%)	2011 Forecast Before Increase*** (millions)	2011 Annual Revenue Increase @ 3.5% (millions)	2011 Impact (%)
Residential	\$507.8	\$48.4	9.5%	\$543.4	\$19.2	3.5%
Small Commercial <21 kW	\$72.8	\$6.9	9.5%	\$81.5	\$2.8	3.5%
Small Commercial 21 - 299 kW	\$223.7	\$21.2	9.5%	\$245.9	\$8.7	3.5%
Small Commercial TOU* 300 - 499 kW	\$77.8	\$7.4	9.5%	\$85.3	\$3.0	3.5%
Medium Commercial TOU* 500 - 999 kW	\$79.2	\$7.5	9.5%	\$88.2	\$3.1	3.5%
Large Commercial TOU* >1000 kW	\$152.4	\$14.4	9.5%	\$165.3	\$5.8	3.5%
Ag < 31 kW	\$2.3	\$0.2	9.5%	\$2.4	\$0.1	3.5%
Ag 31 - 300 kW	\$4.1	\$0.4	9.5%	\$4.4	\$0.2	3.5%
Lighting	\$8.5	\$0.8	9.5%	\$9.7	\$0.3	3.5%
Total	\$1,128.6	\$107.3	9.5%	\$1,226.0	\$43.1	3.5%
* Time Of Use						
**Assumes 9.5% and 3.5% increases for each rate class, combining Residential Tiers II and III, Changing Residential Service Charge to \$7 in 2009, and revisions to The EAPR and MED discount programs.						
***For 2011 the forecast of energy use per customer is less than the forecast for 2009, assuming the effects of energy efficiency and demand reduction programs						

Step 1a: Effective September 1, 2009

The following describes general rate proposals for each class. The proposed effective date for modifications in this section is September 1, 2009:

Residential – The recommendation is to meet the required revenue target with an increase in the \$5.00 Service Charge to \$7.00 and an increase to the tiered energy rates to achieve approximately 9.5 percent to the revenue for the residential class. The increase applies to all residential rates including closed electric, open electric, non-electric, residential time-of-use rate options, and existing pilot programs. The proposal will simplify the standard residential tiered rates by eliminating the third tier and raising the second tier price to offset the revenue loss. It will meet the required revenue targets while maintaining conservation price incentives for summer air conditioning load through second tier pricing.

Small Commercial (0 to 499 kW) – The recommendation is to meet the required revenue target with an overall increase of 9.5 percent on all rate components for all small commercial customers and associated pilot programs.

Medium Commercial TOU (500 to 999 kW) – The recommendation is to meet the required revenue target with an overall increase of 9.5 percent on all rate components for all medium commercial customers.

Large Commercial/Industrial TOU (1 MW and Greater) – The recommendation is to meet the required revenue target with an overall increase of 9.5 percent on all rate components for all large commercial customers including temperature-dependent pricing (TDP), Economic Development and negotiated rates.

Agricultural – The recommendation is to meet the required revenue target with an overall increase of 9.5 percent on all rate components for all agricultural customers.

Street, Traffic, and Security Lights – The recommendation is to meet the required revenue target by increasing rates by 9.5 percent for all lighting rates and associated service components.

Miscellaneous Charges and Fees – The recommendation is to meet the required revenue target by increasing the following fees by 9.5 percent: power factor adjustment, power factor waiver amount, standby service charge and residential multi-phase service charge.

Street Lighting and Outdoor Lighting Rate Schedule Restructuring – This section proposes modifying the Street Lighting Service (SLS) and Outdoor Lighting Service (NLGT) rate schedules to eliminate lamp type specifications and introduce average cost-based monthly billing of luminaires, poles and fixtures, a schedule of which will be updated annually. Energy charges included in the rate schedules will be based on the connected load served and will be applied universally regardless of the lamp type. This proposal also formalizes the process for integrating authorized new lamp types without delaying until a future rate process.

Energy Assistance Program Rate (EAPR) – This section proposes (1) to keep the service charge at the current rate of \$3.50 and (2) an expanded focus on data collection and efficiency programs for high-use EAPR customers. The purpose of this heightened concentration is to develop a customized set of efficiency programs to help the highest users permanently reduce their energy usage. This would lay the foundation for capping the number of kWh that are discounted for EAPR customers.

Medical Equipment Discount (MED) Rate – This section proposes a modification to the medical equipment discount rate. Currently, there is a discount on the service charge and energy charges to assist with the energy costs associated with running a qualified medical device. The proposal is to change the current service charge and energy rate discount to a flat dollar discount per month.

Electric Vehicle Rate – This section proposes modifying the EV rates to include plug-in hybrid electric vehicles in the eligibility for EV rates and to clarify the requirement for a time-of-use (TOU) rate for the vehicle-charging load. A plug-in hybrid electric vehicle (PHEV) is powered by both rechargeable batteries and an internal combustion engine (ICE). The primary source of power is the battery and the ICE serves as backup. The vehicle's battery is recharged by plugging in to the electric grid.

Net Metering Agreement Interconnection Agreements for Qualifying Photovoltaic Installations– These sections of the report propose adding the provisions of the Interconnection Agreement to Rule 21 and moving the provisions of the Net Metering Agreement to a separate sheet in the rate schedules.

Residential Electric Space Heat Tier Allowances– This section proposes to clarify the language of the Residential Electric Heat rate qualifications. Currently there is some ambiguity in the rate language as to which residential electric heat sources qualify for the Residential Electric Heat rate, which gives a greater Tier I allowance to qualifying customers.

Solar Surcharge for SB 1 – This section proposes removing language related to the solar surcharge for Senate Bill 1 (SB 1) from individual tariff sheets and placing it on an individual sheet that applies to all rate classes (1-SB1-1).

Basis for Surcharge – SMUD has a goal to have 125 MW of solar that meet SB 1 requirements by the end of 2016. The solar surcharge was established in 2008 to fund these requirements. The surcharge has been capped not to exceed a total collection for incentives of \$130 million.

Reset of Demand for Commercial Solar/Photovoltaic Installations – This section proposes changing the language of the schedules affecting District-approved PV system installations. This change will provide immediate savings to the customer.

Eliminate Optional Metered Standby Service Charge – This section proposes elimination of the Optional Metered Standby Service Charge. Only the Standby Service based on capacity will be available.

Step 1b: Effective January 1, 2010

Feed-In Tariff – This section proposes establishment of a Feed-in Tariff (FIT) to compensate customers for energy fed into the electric grid by customer-sited distributed generation within SMUD's service territory that meets District eligibility requirements. This includes generation sources that use renewable fuels (Renewable Generation) and generation that increases fuel efficiency by extracting heat for industrial or other on-site purposes (Combined Heat and Power, referred to as CHP).

Step 2: Effective January 1, 2011

The following describes general rate proposals for each class. The proposed effective date for modifications in this section is January 1, 2011, for the General Manager's recommendations:

Residential – The recommendation is to meet the required revenue targets with an overall increase of 3.5 percent on all residential rate components including closed electric, open electric, non-electric, residential time-of-use rate options and existing pilot programs.

Small Commercial (0 to 499 kW) – The recommendation is to meet the required revenue target with an overall increase of 3.5 percent on all rate components for all small commercial customers and associated pilot programs.

Medium Commercial TOU (500 to 999 kW) – The recommendation is to meet the required revenue target with an overall increase of 3.5 percent on all rate components for all medium commercial customers.

Large Commercial/Industrial TOU (1 MW and Greater) – The recommendation is to meet the required revenue target with an overall increase of 3.5 percent on all rate components for all large commercial customers including TDP, Economic Development and negotiated rates.

Agricultural – The recommendation is to meet the required revenue target with an overall increase of 3.5 percent on all rate components for all agricultural customers.

Street, Traffic, and Security Lighting – The recommendation is to meet the required revenue target by increasing rates by 3.5 percent for all lighting rates and associated service components.

Miscellaneous Charges and Fees – The recommendation is to meet the required revenue target by increasing the following fees by 3.5 percent: power factor adjustment, power factor waiver amount, standby service charge and residential multi-phase service charge.

Under some recommendations in the following sections, deleted language shows a strike-through and replacement language is in italics

As noted on the "Rate Increases – Recommended Case" table, for 2011 energy sales per customer are forecast to be less than the forecast for 2009. As a result, revenue by rate class before the 3.5 percent increase as given in the following summaries, will not match those projected for 2009 following the 9.5 percent rate increase.

1. Residential

September 1, 2009

Current residential rates are consistently less than our competitors' rates by as much as 31 percent. Even with the proposed first step increase of 9.5 percent, residential rates will remain 27 percent lower than PG&E rates. While residential class revenue will increase by 9.5 percent, low-income energy assistance (EAPR) customers would continue to see a 35 percent discount on first tier energy and 30 percent discount on the second tier energy. In addition, the energy assistance service charge will remain at \$3.50 per month. This will significantly reduce the impact of the rate increase on these customers. The proposed increase supports equitable recovery of costs between classes.

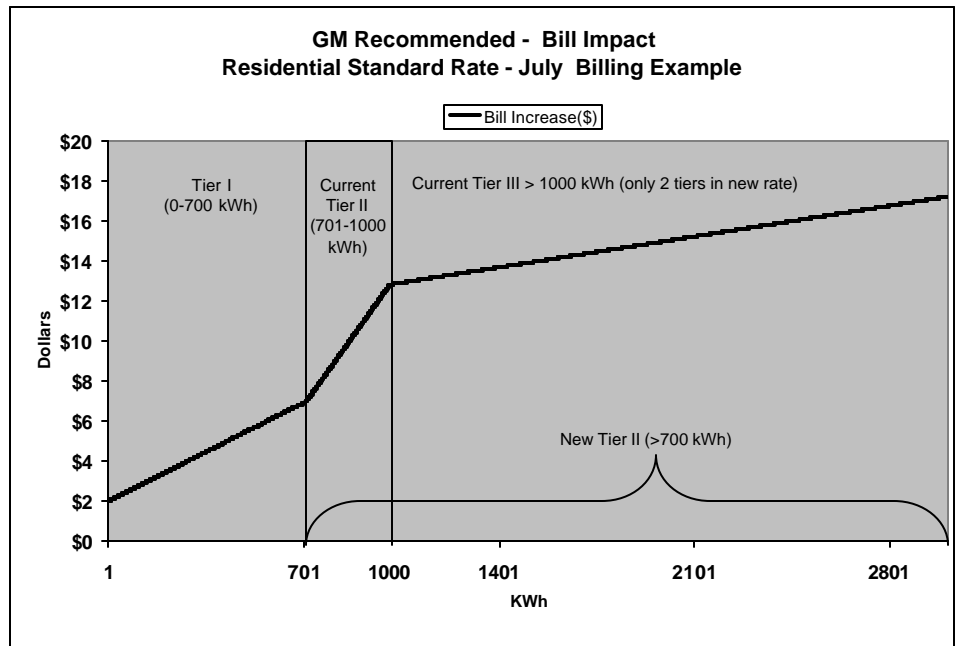
Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, current residential revenues would be \$507.8 million. A 9.5 percent increase to annual residential revenues will raise class revenue to \$556.2 million. This is an increase of \$48.4 million per year.

Recommendations

Increase the revenue for this class by 9.5 percent effective September 1, 2009. It is further recommended that the service charge be increased to \$7 per month to improve recovery of the fixed costs of providing service to each customer. The energy charge for each tier will be reduced by an amount that offsets the additional \$1.50 of the service charge, thus keeping the additional service charge increase revenue neutral for the class.

The chart that follows shows how this structure change will impact bills for customers with monthly energy use between 1 and 3000 kWh for a summer month.



January 1, 2011

With proposed increases of 3.5 percent, residential rates will remain 25.6 percent lower than current PG&E rates not considering any increases that PG&E customers might receive in the meantime. The proposed increase supports equitable recovery of costs between classes.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, estimated residential revenues would change from \$543.4 million (with the September 1, 2009, 9.5 percent increase) to an estimated \$562.6 million after the 3.5 percent increase. This is an increase of \$19.2 million per year.

Recommendations

Increase all bill components by 3.5 percent for all residential rates and pilot program rates. These rate changes are proposed to be effective January 1, 2011.

2. Small Commercial (0 to 299 kW)

September 1, 2009

The District serves its small commercial class of customers on two rates: GSN for accounts with demands less than 21 kW and GSS for accounts with demands from 21 to 299 kW. Even with the proposed increases, the District's small commercial rates in comparison to PG&E's rates will remain 28 percent lower for GSN accounts and 25.8 percent lower for GSS accounts. The proposed increase supports equitable recovery of costs between classes.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, current small commercial revenues would be \$296.5 million. The 9.5 percent rate increase will raise annual small commercial revenues to \$324.6 million. This is an increase of \$28.1 million per year.

Recommendations

Increase rate components of all small commercial rates by 9.5 percent effective September 1, 2009.

January 1, 2011

With a proposed increase of 3.5 percent, GSN rates will remain 25.5 percent lower than PG&E rates and GSS rates will remain 23.2 percent lower than PG&E. The proposed increase supports equitable recovery of costs between classes.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, 2011 small commercial revenues would be \$327.4 million after the September 1, 2009, increase. The 3.5 percent rate increase will raise annual small commercial revenues to \$338.9 million. This is an increase of \$11.5 million per year.

Recommendations

Increase rate components of all small commercial rates an average of 3.5 percent effective January 1, 2011.

3. Small Commercial TOU (300 to 499 kW)

September 1, 2009

The recommended rate increase for the 300 to 499 kW group is 9.5 percent. With implementation of the recommended rate increase, average rates for this class will be 29.7 percent lower than PG&E rates.

Purpose and Revenue Impact

The recommendations will improve class equity and recover required revenues while maintaining competitive rates. During a normal weather year the proposed rate change will increase SMUD revenue by \$7.4 million for an annual total of \$85.2 million for this customer class.

Recommendations

Increase rate components of all medium commercial rates by 9.5 percent effective September 1, 2009.

January 1, 2011

With the proposed 3.5 percent increase, rates for the 300 to 499 kW will be 27.1 percent lower than current PG&E rates.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, current small commercial revenues would be \$85.3 million after the September 1, 2009, 9.5 percent increase. The 3.5 percent rate increase will raise annual small commercial revenues to \$88.3 million. This is an increase of \$3 million per year.

Recommendations

Increase rate components of all small commercial rates by 3.5 percent effective January 1, 2011.

4. Medium Commercial TOU (500 to 999 kW)

September 1, 2009

The proposed rate increase for the 500 to 999 kW commercial group is 9.5 percent. The proposed SMUD average rates for this class will be 24.7 percent less than PG&E rates.

Purpose and Revenue Impact

The recommendations will improve class equity and recover required revenues while maintaining competitive rates. During a normal weather year, the proposed rate change will increase SMUD revenue by \$7.5 million for an annual total of \$86.7 million for this customer class.

Recommendations

Increase rate components of all medium commercial rates an average of 9.5 percent effective September 1, 2009.

January 1, 2011

After a 3.5 percent increase, the average rates for the 500 to 999 kW commercial group will be 22.1 percent less than PG&E rates.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, current medium commercial revenues would be \$88.2 million after the September 1, 2009, 9.5 percent increase. The 3.5 percent rate increase will raise annual medium commercial revenues to \$91.3 million. This is an increase of \$3.1 million per year.

Recommendations

Increase rate components of all medium commercial rates by 3.5 percent effective January 1, 2011.

5. Large Commercial/Industrial TOU (1 MW and Greater)

September 1, 2009

The recommended rate increase for the 1000+ kW group is 9.5 percent. With implementation of the recommended rate, average rates for this class will be 19.4 percent lower than PG&E rates.

Purpose and Revenue Impact

The recommendations will improve class equity and recover required revenues while maintaining competitive rates. During a normal weather year the proposed rate change will increase SMUD revenue by more than \$14.4 million for an annual total of \$166.9 million for this customer class.

Recommendations

Increase rate components of all large commercial, TDP, Economic Development, and Special Contract rates by 9.5 percent effective September 1, 2009.

January 1, 2011

With proposed increases of 3.5 percent, large commercial rates will remain 17.2 percent lower than PG&E rates.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, current large commercial revenues would be \$165.3 million after the September 1, 2009, 9.5 percent increase. The 3.5 percent rate increase will raise annual large commercial revenues to \$171.1 million. This is an increase of \$5.8 million per year.

Recommendations

Increase rate components of all large commercial, TDP and Economic Development and Special Contracts by 3.5 percent effective January 1, 2011.

6. Agricultural

September 1, 2009

Agricultural rates represent less than 1 percent of the District's annual revenue. The proposed increase is 9.5 percent, and this increase will result in SMUD average rates for this class being 20.4 percent below PG&E rates.

Purpose and Revenue Impact

The proposed rate change will increase the District's revenue by \$600,000 for an annual total of \$7.2 million for this customer class.

Recommendations

Increase rate components of all small agricultural rates by 9.5 percent effective September 1, 2009.

January 1, 2011

With the proposed 3.5 percent increase for the small agricultural customers, rates will be 17.7 percent lower than PG&E rates.

Purpose and Revenue Impact

The recommended rates will help meet additional revenue requirements while maintaining competitive rates. During a normal weather year, current agricultural revenues would be \$6.8 million after the September 1, 2009 increase. The 3.5 percent rate increase will raise annual agricultural revenues to \$7.2 million. This is an increase of less than \$300,000 per year.

Recommendations

Increase rate components of all small agricultural rates by 3.5 percent effective January 1, 2011.

7. Street, Traffic, and Security Lights

September 1, 2009

Street, traffic, and security lighting rates are proposed to increase by 9.5 percent. With implementation of the proposed rate, District rates for this class will be 41 percent less than PG&E's rates. This class includes the following:

Street Lighting:

Customer-owned and maintained	SL_COM
Customer-owned, District-maintained	SL_CODM
District-owned and maintained	SL_DOM

Traffic Signals:

Non-Metered Traffic Lights (closed)	SL_TSF
Metered Traffic Lights	TS_F, TS

Outdoor Security Lights:

Residential Night Lights	NLGT
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Purpose and Revenue Impact

The proposed 9.5 percent increase in lighting rates will increase the District's revenue by \$806,000 for total annual revenue of approximately \$9.3 million for this customer class.

Recommendations

Increase all lighting rates and service components by 9.5 percent effective September 1, 2009.

January 1, 2011

Street, traffic, and security lighting rates are proposed to increase by 3.5 percent. With implementation of the proposed rate, District rates for this class will be 35 percent less than PG&E's rates.

Purpose and Revenue Impact

The proposed 3.5 percent increase in lighting rates will increase the District's revenue by \$325,000 for total annual revenues of approximately \$10 million for this customer class.

Recommendations

Increase all lighting rates and service components by 3.5 percent effective January 1, 2011.

8. Miscellaneous Charges and Fees

September 1, 2009

A variety of charges or fees are proposed to be increased in this rate process.

Purpose and Revenue Impact

The General Manager recommends increasing charges or fees for power factor adjustment, power factor waiver, standby charges, and residential multi-phase service 9.5 percent. Revenue impacts are expected to be less than \$130,000 per year.

Recommendations

Effective September 1, 2009, increase charges or fees by 9.5 percent for:

Power factor adjustment

Power factor waiver

Standby charges

Residential multi-phase service

January 1, 2011

A variety of charges or fees are proposed to be increased in this rate process by 3.5 percent.

Purpose and Revenue Impact

The General Manager recommends increasing charges or fees for power factor adjustment, power factor waiver, standby charges, and residential multi-phase service by 3.5 percent. Revenue impacts are expected to be less than \$50,000 per year.

Recommendations

Effective January 1, 2011 increase charges or fees by 3.5 percent for:

Power factor adjustment

Power factor waiver

Standby charges

Residential multi-phase service

9. SLS and NLGT Rate Schedule Restructuring

The Street Lighting Service Rate Schedule SLS and the Outdoor Lighting Service Rate Schedule NLGT currently provide very specific language regarding the lamp types to be installed for “Customer-Owned, District-Maintained”(CODM) and “District-Owned and Maintained”(DOM) lamps. SMUD currently is unable to provide new types of outdoor lighting under these rates without a rate process. There are promising technologies for outdoor lighting and SMUD has been receiving requests for lamps and fixtures not presently specified in the rate schedules. As they become economically viable and practical to implement, SMUD would like to be able to provide these technologies to customers without requiring a rate process. Some of the benefits of utilizing new lighting technologies include reducing the customer’s energy and carbon footprint, reducing maintenance requirements, and improving light and color quality, which is of interest to law enforcement and other community groups.

Purpose and Revenue Impact

This proposal will eliminate lamp type specifications in the SLS and NLGT rate schedules and introduce average cost-based monthly billing for fixtures, lamps, poles, and other associated equipment, a schedule of which will be reviewed annually and updated as appropriate. Energy charges will be based on the connected load served and will be applied universally. Under this proposal, the Solar Surcharge will become a separate line item on the customers’ bill as with other District billing components. This proposal also formalizes the process for integrating new outdoor lighting technologies without a rate process. Distribution Services will have authority to include and/or remove supported fixtures, lamps and other equipment associated with the provision of outdoor lighting and will review the schedule annually to determine if equipment or monthly fees require modification. This restructure is revenue neutral for the class.

Recommendations

The recommended modifications to Rate Schedule SLS are as follows:

Section V, Customer-owned, District-maintained – Remove table of monthly charges by lamp type and modify language as follows:

Where the customer owns the street lighting equipment and desires the District to supply energy and switching and, in addition, provide for the lamp servicing and maintenance, such service will be rendered for lamps and fixtures of sizes and types as indicated on a District maintained list of approved equipment.

The monthly charge for energy and switching will be based on the connected load served and will be 2.29¢ per watt month. The manufacturer's rating in watts (including all auxiliary equipment) will be used as connected load.

There will be a separate monthly charge for maintaining each fixture and/or lamp. The District will maintain a list of acceptable lamps and fixture types with nominal ratings and the corresponding monthly maintenance charge. The District retains the right to modify the list of acceptable lamps and fixtures to accommodate changing technology or other business needs criteria. The list of acceptable lamp and fixture types, and their accompanying monthly charge, will be available on the District's Web site or will be furnished upon request. This list will be reviewed annually and updated as appropriate.

This service is restricted to District-approved locations.

When a customer requests that the District finance as well as install street lighting equipment, provisions of Rule and Regulation 2 apply.

- Section VI, District-owned and maintained – Remove table of monthly charges by lamp type and table of additional facilities and modify language as follows:

Where the customer wishes the District to install, operate, and maintain the entire street lighting system, such service will be provided with fixtures and lamps of sizes and types as approved by the District. A current schedule of District-approved fixtures and lamps eligible for service under this rate will be maintained by the District.

The monthly charge for energy and switching will be based on the connected load served and will be 2.29¢ per watt month. The manufacturer's rating in watts (including all auxiliary equipment) will be used as connected load.

There will be a separate monthly charge for installation and maintenance of each fixture (including lamps, refractors, ballasts, photo cells and other typical support equipment). These charges are based upon the installation of street lighting fixtures of a design specified by the District and mounted by means of varying length brackets affixed to existing wood poles that are used to carry distribution system circuits. The District will maintain a list of acceptable lamps and fixture types with nominal ratings and the corresponding monthly maintenance charge. The District retains the right to modify the list of acceptable lamps and fixtures to accommodate changing technology or other business needs criteria. The list of acceptable lamp and fixture types, and their accompanying monthly charge, will be available on the District's Web site or will be furnished upon request. This list will be reviewed annually and updated as appropriate.

When additional or alternative facilities are installed upon a customer's request, additional monthly charges will be made per the list of acceptable facilities, which will be available on the District's Web site or will be furnished upon request. This list will be reviewed annually and updated as appropriate.

RELOCATIONS AND CHANGES

No change to existing language.

NEW SERVICE

No change to existing language.

The recommended modifications to Rate Schedule NLGT are as follows:

~~Section II, Character of Service – “Lamps shall be approximately 175-watt mercury-vapor, 100-watt sodium vapor, 400-watt mercury vapor or 200-watt sodium vapor with luminaire and bracket, as specified by the District, and shall be supported on District-owned poles which are used to carry distribution system circuits used for other District purposes, and shall be at locations approved by the District.” “A current schedule of District-approved fixtures and lamps eligible for service under this rate will be~~

maintained by the District. Lamps shall be supported on District-owned poles that are used to carry distribution system circuits used for other District purposes, and shall be at locations approved by the District.”

- Section III, Rate – Remove table of monthly charges by lamp type and modify language as follows:

The monthly charge for energy and switching will be based on the connected load served and will be 2.29¢ per watt month. The manufacturer’s rating in watts (including all auxiliary equipment) will be used as connected load.

There will be a separate monthly charge for installation and maintenance of each fixture (including lamps, refractors, ballasts, photocells and other typical support equipment). These charges are based upon the installation of street lighting fixtures of a design specified by the District and mounted by means of varying length brackets affixed to existing wood poles that are used to carry distribution system circuits. The District will keep a listing of approved fixtures and lamps with nominal ratings and the corresponding monthly maintenance charge. The District retains the right to modify the listing of approved fixtures and lamps to accommodate changing technology or other business needs criteria. The list of acceptable lamp and fixture types, and their accompanying monthly charge, will be available on the District’s Web site or will be furnished upon request. This list will be reviewed annually and updated as appropriate.

10. Energy Assistance Program (EAPR)

The District’s Energy Assistance Program (EAPR) has subsidized the cost of electricity for qualifying low-income customers since 1989. Originally, the reduced price was related to the base (Tier I) usage for a typical residence. However, over time it has evolved into discounts for all usage. As the amount of money dedicated to providing this assistance has increased, SMUD is exploring the potential benefits of developing energy efficiency (EE) programs specifically designed to help these customers, especially the highest use customers, to reduce their energy usage permanently. This would provide long-term savings for both SMUD and the EAPR customers.

Purpose

The District is proposing to keep the EAPR service charge at the current \$3.50. Conversely, SMUD is considering a proposal to limit the EAPR discount in a future rate process. The EAPR discount would apply up to an energy sales ceiling so that monthly sales beyond the ceiling would no longer be discounted. However, before limiting the EAPR discount, staff would like to ensure customers that have usage beyond the ceiling have access to a customized set of energy efficiency programs, education and incentives to give these customers an opportunity to reduce their usage prior to changes in the EAPR discount.

To this end, staff plans to collect information on the age, condition, efficiency and fuel type of appliances, HVAC and water heating systems, lighting, thermostats and controls, building shell conditions, and home electronics being used by high-usage EAPR customers. Following that, staff will identify efficiency measures that best suit the needs of these high-use EAPR customers in a cost effective way.

A pilot EE program with the objective of reducing high-use EAPR customer’s usage and bills will be in effect for two years prior to any changes in the EAPR discount. That will provide staff time to evaluate the District’s ability to permanently reduce EAPR customer usage and ensure the changes in the EAPR discount have a minimal impact on customers.

Staff intends to do the following to achieve this goal:

- Identify target group of high-use customers for new energy efficiency programs .
- Survey target group to define behavior patterns and residence conditions that contribute to high-energy usage.
- Identify the most cost efficient means of reducing target group’s energy consumption.
- Formulate a program to define the target group, incorporate the appropriate energy efficiency measure, and to measure the success of reduced energy consumption for program participants.
- Conduct annual evaluation of program penetration and associated usage reductions to determine the viability of capping the number of kWh that qualify for the EAPR discount.

The District currently offers a variety of efficiency programs . Beyond weatherization and compact fluorescent lamps (CFLs), most of the current programs provide rebates or financing assistance. High-usage EAPR customers have a unique set of circumstances . Not only are funds limited, but most of our EAPR customers live in rental housing. The final package of energy efficiency measures will be decided after the research has been evaluated. The intent will be to implement those measures that have the greatest potential to immediately and significantly lower energy use and customer bills .

Depending on the mix of measures actually required by each participant, the total cost per participant (assuming SMUD pays all costs) could range from \$200 to \$8,000. The program will be evaluated and savings of participants tracked to ensure the program is cost effective and lowering the bills of high-use EAPR customers.

Recommendations

Effective September 1, 2009, modify language as follows:

Residential Rate Schedule R:

Section III. Optional Medical Equipment Discount and Energy Assistance Program

Energy Assistance Program

Delete:

~~“A discount of 30 percent of the service charge and 35 percent of the energy charges for the Tier I Baseline Quantities per month and 30 percent of the energy charges for the Tier II and Tier III quantities per month is applied for low income residential customers who meet the eligibility requirements as specified in Sheet No. 1-EAPR-1.”~~

Insert:

Please see Sheet 1-EAPR-1 for details on the Energy Assistance Program.

Effective September 1, 2009, on Residential and General Service Energy Assistance Program sheet *1-EAPR-1* after the **Qualifications** paragraph insert language as follows:

Residential Discount

The service charge is \$3.50. A 35 percent discount of the energy charges for the Tier I Baseline Quantities per month and 30 percent discount of the energy charges for the kWh quantities in excess of Tier I per month is applied for low-

income residential customers who meet the eligibility requirements as specified below.

11. Medical Equipment Discount (MED) Rate

Background

SMUD's current MED rate provides a discount on all energy used by customers who qualify for the rate.

When SMUD first adopted the MED rate, the intent was to make the cost of electricity more affordable for qualifying customers with severe medical conditions who relied on an electric medical device. The original MED rate consisted of a 50 percent discount on the first 500 kWh of monthly use.

The current discount, which is about 30 percent on all usage, was adopted in 2005. For customers receiving the EAPR discount, the additional MED rate discount is 20 percent on the first tier of usage and the Service Charge. As it currently is structured, this program provides a discount that significantly exceeds the cost to run the qualified medical devices.

For our climate area, PG&E's discount allows 500 kWh per month of additional baseload energy for medical equipment devices or severe medical conditions. The approach used by other municipal utilities in the state to provide assistance with the cost of medical devices varies widely as shown in the table below.

Utility	Medical Discount Method
Roseville	50% off Tier 1, 15% off Tiers 2 & 3 (the discount is for low-income customers only)
LADWP	Flat amount per month - \$14
Redding	No discount for medical equipment
PG&E	Extend Tier 1 by 500 kWh per month, cap price at Tier 3 rate for Tiers 3, 4, & 5
Lodi	25% discount off total bill

One of the issues identified by staff is that the list of qualified devices in SMUD's tariff has not been updated since 1989 when the rate was first adopted. Medical devices that once were energy-intensive are much more energy efficient today or have converted to battery operation. Some devices now require trained medical staff to operate and home models no longer are used. Therefore it is proposed to separate the list of qualified devices from the tariff and update that list to reflect changes in technology, medical advances and cost to operate.

A second issue identified by staff is the relative ability of customers to pay for the additional cost of running the medical device. Currently there is no income limit to qualify for the discount. Some customers receiving a discount fall into higher income brackets.

A third issue is the cost to operate the medical devices. The average cost to run the devices listed by enrolled customers is about \$7 while the average discount is about \$42 per month. A significant number of customers are receiving the discount that have medical devices that use less than a dollar of energy per month. Staff has estimated that if all energy to power medical devices used by existing customers on the MED rate were to be provided free of charge, the total discount would be in the range of \$683,000 per

year, assuming customers with multiple devices are properly identified. This compares to the 2009 budget allowance of \$4 million for MED rate.

Strategic Directive 2, SMUD's policy on rate making goals include balancing equitably allocated rates with rates that meet the needs of people with severe medical conditions. Clearly the current MED rate does not meet these goals. In developing options, staff had to balance approaches that would more closely match discount with cost against the administrative difficulties a more complex discount mechanism would introduce.

Staff has extensively reviewed several options to modify the MED rate.

Options that divide the current list of medical devices/conditions into groups based on average usage may get the discount closer to the cost of the energy consumed by the medical device. They may also make the application process and administration more invasive and complicated for the customer, the doctors and the MED rate program staff. These options would require every device to be listed in order to accurately place the customer in the correct group.

Options with only one discount require only one qualifying device to be submitted for the entire household and are simpler to administer by staff.

The General Manager recommends some general modifications to the MED rate that meet the intent of the rate. In the process, staff reviewed three options to modify the discount.

General Modifications

Removing devices from qualified list

If the MED rate were modified to remove devices with negligible use (10 kWh per month or fewer), or devices used for only therapeutic purposes the subsidy would be reduced by 21 percent. Going forward the list of qualified devices could be updated to keep pace with technological and medical advances. These updates would be facilitated if the list were removed from the tariff and managed by the program staff under the direction of the General Manager.

Because the cost of operating devices with negligible energy use is minimal or the devices are used only for therapeutic purposes, and not severe medical needs, SMUD would no longer apply credits for such devices.

Revenue Impact: \$765,000 reduction in program costs

Customer Impact: 2,100 no longer qualify

Adopt an income limit for qualification

SMUD has a low-income rate for customers at or below 200 percent of the poverty level that currently discounts the bill by about 30 percent. There is no restriction based on income for the MED rate. Presently, only 25 percent of MED customers are also on the low-income rate.

With an average cost of \$7.00 per month to run a device there are many customers who can afford the additional cost. To ensure that customers who otherwise could not afford the cost of operating a medical device receive the intended benefit of this rate an income test of 400 percent of the poverty level could be established as a qualifier. Staff estimates that about 50 percent of SMUD's residential class would qualify at this income limit.

Establish a petition process

Because the cost of operating medical devices, though moderate for most customers, can be more than the discount, SMUD could establish a petition process. Customers who believe the discount does not meet their medical needs may apply for additional discount.

Additional information would be required to verify the device or devices do exceed the normal range of usage. Additional discount would be at the discretion of the program staff.

Discount Options

Option 1) One Discount Level

Adopt a flat \$15 discount per month on the energy charges per qualified customer. Adopt a petition process for extraordinary needs.

Revenue Impact: \$2.06 million reduction in program costs

If negligible devices were to be removed from the device list, an additional \$340,000 would be saved.

Customer Impact: Average discount \$15 per month

Pros:

- It would require only one qualified medical device per application.
- It would place a cap on the total discount per customer and reduce the amount of over-compensation.
- It would retain the price signal of higher tiers.
- It is competitive with other California utilities.

Cons:

- The average MED rate customers would see a \$27 per month increase in their bills.

Option 2) Two Discount Levels

This option would provide a discount based on average usage of the most energy-intensive device.

In order to determine the best solution for the customer, the application must include every device on the list of qualified medical equipment devices. Multiple devices per application would be accepted, but a doctor must verify that each device is needed to “sustain, restore, or supplant a vital function, or mechanical equipment that is relied upon for mobility both within and outside of buildings.”

Because the average cost to run devices is varied, SMUD would divide the devices into two groups, each with their own discount amount. If the customer has a high energy use device they would be eligible for a \$15 per month energy credit (30 percent of existing MED customers qualify). Otherwise they would be eligible for a \$5 per month energy credit (70 percent of existing MED customers).

Revenue Impact: \$2.71 million reduction in program costs. With negligible devices removed from the device list, an additional \$124,000 would be saved.

Customer Impact: Average discount \$8 per month.

Pros:

- It would bring the credit closer to the cost of operating a device.
- It would place a cap on the total discount and reduce the amount of over-compensation.
- It would retain the price signal of higher tiers.
- It is competitive with other California utilities.

Cons:

- The average MED rate customers would see a \$34 per month increase in their bills.
- It would require customers to list every qualified device on the application.
- It would require medical personnel to verify the need of each device.

Option 3) Extended 1st Tier Allowance

This option would provide an extension of the MED customer's Tier I allowance.

SMUD would add 300 kWh to the qualified MED customer's Tier I usage allowance. In other words, the first 300 kWh that would have been charged at Tier II rates would be charged at Tier I rates.

Revenue Impact: \$2.49 million reduction in program costs.

With negligible devices removed from the device list, an additional \$284,000 would be saved.

Customer Impact: Average discount \$10 per month.

Pros:

- It would bring the credit closer to the cost of operating a device.
- It would only require one qualifying device on the application.
- It would place a cap on the total discount per account and reduce the amount of over-compensation.
- It is competitive with other California utilities.
- It more closely aligns with PG&E's approach to the discount.

Cons:

- All Tier I customers would have their discount go to zero.
- The average MED rate customers would see a \$32 per month increase in their bills.

Recommendations

Effective September 1, 2009

The General Manager recommends that the medical equipment discount be modified as outlined under Option 1 described above:

- Discount the energy charges up to \$15 per month.
- Update the list of medical devices as necessary, appropriately and in a timely manner, by removing the list of devices from the Medical Equipment Discount Program Tariff sheet (1-MED-1) to allow the General Manager to revise these devices as costs and technology change.
- Create a petition process for customers with medical equipment devices with extraordinary usage needs.

Proposed language:

Medical Equipment Discount Program (1-MED-1)

Applicability

To customers receiving service under residential rates who meet the eligibility requirements listed below.

Qualification

An application must be completed along with certification from *qualified health professional doctor of medicine or an osteopath licensed to practice medicine in the State of California* stating that a medical need exists. *A current list of qualified health professionals is posted on <http://www.smud.org>.*

Discount

A maximum discount of \$15 per month will be applied to the energy portion of the bill.

Medical Equipment Device

A medical equipment device, for purposes of these rates, is defined as any medical device requiring utility-supplied energy for its operation that is regularly required to sustain the life of a person residing in a residential dwelling. ~~The term “medical equipment device” includes, but is not limited to, respirators, iron lungs, hemodialysis machines, suction machines, electric nerve stimulators, pressure pads and pumps, aerosol tents, electrostatic and ultrasonic nebulizers, compressors, IPPB machines, and motorized wheelchairs.~~ It also includes air conditioning for all residential rate categories or electric heat for customers on an electric space heat rate, for *patients with special electric space heating needs or air conditioning needs. Qualified devices change frequently as technology changes. A current list of qualified devices and medical conditions is posted on <http://www.smud.org>.*

Eligibility

To qualify for medical equipment discount you must certify in writing that you or a full-time resident in your home is:

- *Is dependent on a medical equipment device used in your home or*
- ~~a paraplegic, hemiplegic, or quadriplegic person or multiple sclerosis. Has a medical condition~~ with special electric space heating needs or air conditioning needs.

~~Medical conditions other than paraplegia, hemiplegia, quadriplegia, or Multiple Sclerosis may also qualify for this rate if electrically operated equipment is used to sustain, restore or supplant a vital function.~~

Application

The Medical Equipment Discount Program option will be effective commencing with the beginning of the billing period in which the request is received and approved. Return to another rate option will be effective commencing with the beginning of the billing period in which the request is received or the cancellation date, if enrollment in the Medical Equipment Discount Program is terminated.

Petition

If this discount does not meet a household's medical-energy needs, customers may contact SMUD to discuss additional assistance.

Residential Service Rate Schedule R (1-R-2)

III. Optional Medical Equipment Discount and Energy Assistance Programs

Medical Equipment Discount Program

Delete:

~~A discount of 30 percent of the service charge and 35 percent of the energy charges for the Tier I Baseline Quantities per month and 30 percent of the energy charges for the Tier II and Tier III Quantities per month for the residential customers who certify that a full-time resident of the household requires regular use of a medical equipment device that is essential to sustain life or relied upon for mobility as outlined in Sheet No 1-MED-1.~~

Insert:

Please see sheet 1-MED-1 for details on the Medical Equipment Discount Program.

Delete:

~~Medical Equipment Discount Program & Energy Assistance Programs~~

~~For residential customers qualifying for both Medical Equipment Discount and Energy Assistance Program options, a discount of 50 percent of the service charge and 55 percent of the energy charges for the Tier I Baseline Quantities per month and 30 percent of the energy charges for the Tier II and Tier III Quantities per month.~~

12. Establish a Feed-In Tariff for Distributed Generation

Overview

This section proposes a SMUD Feed-in Tariff (FIT), so called because it establishes prices for buying electricity that is “fed into” our distribution system from eligible generation units at customer sites.

The FIT will apply to two types of customer-sited distributed generation. The base FIT will apply to Combined Heat and Power (CHP) generators, which use traditional fossil fuels such as natural gas but boost the plant’s overall efficiency by utilizing the waste heat for on-site purposes. A higher-priced FIT will be offered for power produced from renewable sources such as solar and bio-gas.

Feed-In Tariff for Distributed Generation

The proposed FIT is in keeping with SMUD’s vision to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region.

For SMUD and our customers, the FIT will be mutually advantageous. By standardizing our purchase offer, the FIT will streamline the time and effort currently required to contract with power generators. For customers, the FIT will provide a new opportunity to sell power at a fair market price from small-scale generation units.

In particular, the FIT for Renewable Generation will assist SMUD in meeting the goals not only for our Renewable Portfolio Standard (RPS), but also for greenhouse gas reduction.

Moreover, the Feed-in Tariff for CHP will support customer-owned distributed generation that is more efficient than other grid-supplied electricity. Because these applications utilize waste heat as an energy source for other on-site uses, they will reduce overall fuel use and improve local air quality. Additionally, CHP units may reduce the amount of peak capacity SMUD would otherwise procure and will improve District reliability by increasing our peak load-serving capacity.

State Policy Support

Currently in California, the Public Utilities Commission (CPUC) is conducting proceedings to expand FIT for investor-owned utilities. They have already approved a FIT for eligible renewable generation systems up to 1.5 MW. Meanwhile, the California Energy Commission, in its most recent *Integrated Energy Policy Report*, recommends the implementation of a FIT for all eligible renewable generation up to 20 MW.

On the CHP side, the Waste Heat and Carbon Emissions Reduction Act, passed by the state Legislature in 2007, requires SMUD and other utilities to support customer-owned CHP systems by providing a market for purchasing their excess electricity production “at a just and reasonable rate.” A FIT will satisfy this requirement.

By implementing a FIT in support of these state energy policies, SMUD will continue its leadership in the development of distributed generation and renewable resources.

Rate Impact

By design, the FIT for both CHP and Renewable Generation will be revenue neutral so as to avoid rate-based subsidies by other customer-owners. This means that the prices offered in the tariff will be offset by the underlying costs avoided by SMUD for comparable power purchases and deferred transmission requirements.

To best approximate this balance, the FIT incorporates several time-dependent characteristics: prices will vary by the metered time-of-delivery, the term of the chosen contract, and the year of initial power delivery.

In addition, SMUD staff will periodically review the FIT offering in light of the most current cost estimates, and recommend changes to the prices posted on SMUD’s Web site when warranted. Finally, the total capacity eligible for the FIT will be capped at 100 MW of combined rated generation capacity. This will further reduce the tariff’s risk of future rate impacts by limiting the District’s exposure to long-term cost uncertainty.

Recommendation

Staff finds that a Feed-in Tariff (FIT) will provide our customer-owners with a new opportunity to own or host an efficient small-scale generation plant and to receive fair compensation for its power output. For SMUD, the tariff corresponds with our core value of environmental responsibility, while assuring compliance with current legislative requirements.

For these reasons, the General Manager recommends the adoption of a Feed-in Tariff for customer-sited Distributed Generation, effective January 1, 2010.

To be eligible for the FIT, the distributed generation resource must:

- Qualify under SMUD terms as a Combined Heat and Power (CHP) or Renewable Generation facility;
- Interconnect within the District's service territory in accordance with Rule 21;
- Be sized in generation capacity no greater than 5 MW; and
- Not utilize other SMUD incentives or benefit from its net-metering option.

It is further recommended that:

- Total generation under the tariff be capped at 100 MW District-wide;
- The tariff be offered for contract terms of 10-, 15- and 20-years; and
- The structure of the tariff pricing be differentiated by metered time-of-delivery periods that conform with the District's underlying costs.

A pro forma tariff which provides the full terms and pricing methodology of the proposed **Feed-in Tariff for Distributed Generation** (Schedule FIT) is in Appendix A. Actual price tables will be posted on SMUD's Web site and will be updated periodically subject to changing cost conditions.

13. Electric Vehicle Rates

This section proposes modifying the electric vehicle (EV) rates to include plug-in hybrid electric vehicles in the eligibility for EV rates and to clarify the residential requirement for service under the time-of-use (TOU) rate.

A plug-in hybrid electric vehicle (PHEV) is powered by both rechargeable batteries and an internal combustion engine (ICE). The primary source of power is the battery and the ICE serves as backup. The vehicle's battery is recharged by plugging in to the electric grid.

A. Rate for Plug-in Hybrids

The District has a long history of encouraging electric vehicle transportation. In 1990 SMUD adopted the policy of electrifying our transportation sector to clean up Sacramento's air and take a leadership role in reducing the nation's dependence on foreign oil. In 1992 SMUD provided customers an optional rate to recharge electric vehicles (EV) that rely solely on a rechargeable battery for power.

Purpose and Revenue Impact

Advanced technology now offers plug-in hybrid vehicles that cost substantially less to operate than gas powered vehicles and reduce air pollution due to lessened greenhouse gas emissions. They are designed for the convenience of home or workplace recharging.

The existing rate schedules provide only for the EV; the schedules do not include the PHEV.

Due to the limited number of PHEVs currently available, their impact on revenue will be negligible.

B. Language Clarification

Purpose and Revenue Impact

This is the current residential EV rate language:

“This option is for residential customers who own licensed passenger electric vehicles, and take service under the optional Time-of-Use Rate (Option 1) upon proof of vehicle registration.”

Questions have arisen as to whether the requirement for taking service under the time-of-use rate includes service to the residence or is only required for the vehicle charging.

There is no revenue impact to the language clarification. An EV customer was never required to take their residence service on a TOU rate.

Recommendations

To add the PHEV to the Electric Vehicle Rate and to clarify the EV Rate language, modify the residential rate schedule effective September 1, 2009, as follows (changes in italics):

(C) Electric Vehicle (EV), Plug-in Hybrid Electric Vehicle (PHEV)

This option is for residential customers who own licensed passenger electric vehicles *and/or passenger plug-in hybrid electric vehicles*, and take service *for the vehicle charging* under the optional Time-of-Use-Rate (Option 1) upon proof of vehicle registration.

To include the PHEV, modify the General Service rate schedule as follows (changes in italics):

C. Electric Vehicle (EV), Plug-in Hybrid Electric Vehicle (PHEV)

Owners of licensed commercial electric vehicles (EV) *and/or commercial plug-in hybrid electric vehicles (PHEV)* may choose to have a charging location be billed under GSTOU2.

14. Net Metering Interconnection Agreements

SMUD has long required both an interconnection agreement and a net metering agreement for customers who install qualifying photovoltaic generation on their service. The interconnection agreement is essential to ensure that both SMUD’s distribution system and employees are protected from injury. The net metering agreement is intended to provide the customer-owner with the provisions of net metering as reflected in the charges for electricity provided to the customer by SMUD and credits for electricity supplied by the customer to SMUD. Getting customers to sign both agreements is straightforward when the facility is first installed. It becomes difficult, however, to obtain these agreements when the ownership of the facility changes. Moving the provisions of the net metering agreement to a separate sheet in the rate schedules provides the legal basis for net metering and eliminates a need for a separate agreement signed by the customer. Adding the provisions of the interconnection agreement to Rule 21 eliminates the need for a specific agreement for each PV installation.

Revenue Impact

Eliminating the requirement for both net metering agreements and interconnection agreements for qualifying net metered photovoltaic facilities will not impact revenue and may reduce expenses slightly when SMUD no longer needs to identify property sales and contact new owners to obtain agreements.

Recommendation

Move the provisions of the current interconnection agreement in Rule 21 and eliminate the requirement for qualifying photovoltaic facilities to require an agreement. Move the provisions for the net metering agreement into a separate page in the rate schedules (1-NM-1) and eliminate the requirement for qualifying photovoltaic facilities to require an agreement.

Language for rate schedule Net Metering for Eligible Facilities (1-NM-1) can be found in Appendix B.

15. Residential Electric Space Heat Tier Allowances

The District provides an additional winter energy allowance at Tier I rates for customers who have qualifying electric space heat for their homes.

Purpose and Revenue Impact

The proposed language will simplify the qualification language in Section VII, A. of the Residential Rate Schedule R.

Recommendations

It is recommended that the following language replace Section VII A. Electric Space Heat

Residential Rate Schedule R.VII.A

A. Electric Space Heat

An additional kilowatt tier allowance during the winter months is applicable to residential customers with electric space heating systems meeting the following criteria:

*No domestic space heat equipment other than electric is installed at the metered premise; **and***

The electric space heating system is one of the following:

*An electric space heating system that qualified under the Closed Electric Heat rate before May 1, 1996, **or***

*A heat pump, including any unit with electric resistance backup, **or***

*An electric resistance heating system that was installed prior to September 1, 1980, **or***

An electric resistance heating system is used to supplement a geo-thermal, solar or other renewable fuel heating system.

*Non-renewable sources of space heat systems that do **not** qualify for the residential electric space heat winter tier allowance include:*

Fossil fuels (such as natural gas, propane, gasoline and oil); Wood and pelletized fuels.

16. Solar Surcharge for SB 1

During SMUD's budget process, staff estimates the funding requirements for the following year to meet the planned SB 1 goals for the Board's solar initiative and adjust for over and under collections from the previous year. This required funding is divided by the District's forecasted energy and results in an updated surcharge on all of the rate schedules on January 1 of the following year. This surcharge is reflected as a percentage increase for lighting rates that do not have a formal price per kWh.

Issue and Revenue Impact

Moving the solar surcharge to a specially designated sheet in the Rules and Regulations section of the District's tariffs will allow for better explanation within the tariffs of what the purpose of the solar surcharge is, how it is calculated and how it is limited. In addition, presenting the surcharge in one location rather than throughout the rate schedules streamlines the update process and provides less margin for error.

Moving the solar surcharge to a separate sheet in the tariffs will have no impact on revenue.

Recommendation

Remove language in the rate schedules relating to the solar surcharge and place it on a separate sheet, Solar Surcharge (1-SB1-1) (See Appendix C).

17. Reset of Demand for Commercial Solar/Photovoltaic Installations

The District provides a variety of programs for commercial customers to encourage installation of solar/photovoltaic (PV) systems. Currently, customers participating in a District-sponsored program will continue to receive demand billing based on up to 12 months of historical demands.

Purpose and Revenue Impact

The proposed language will provide immediate savings to the customer when implementing a District-approved installation of PV systems and will only slightly reduce District revenues until the new demands have been reset. The District impact is negligible.

Recommendations

The General Manager recommends modifications effective September 1, 2009, to rate schedules GS, TOU1, TOU2 and TOU3 as follows:

General Service Rate Schedule GS.VI.F

F. Implementation of Energy Efficiency Program *or Installation of New Solar/Photovoltaic Systems*

Customers, who implement a District-sponsored Energy Efficiency program or a District-approved solar/photovoltaic system to offset their on-site energy usage, may request a reset of their 12-month historical demand upon completion of the project.

III.G of sheets TOU1, TOU2, TOU3

G. Implementation of Energy Efficiency Program or Installation of New Solar Photovoltaic Systems

Customers who implement a District-sponsored Energy Efficiency program or who install a District-approved solar/photovoltaic system to offset their on-site energy consumption may request a reset of their 12-month historical demand upon completion of the project.

18. Eliminate Optional Metered Standby Service Charge

The District has a long history of encouraging distributed generation that utilizes renewable resources and/or efficient, environmentally friendly non-renewable resources. In 2005, SMUD adopted a distributed generation policy (Board Resolution No. 01-04-04) and subsequently adopted Strategic Directive 9 (SD-9). Both promote deployment of clean distributed generation.

District staff has been working with several customers over the past year to evaluate the feasibility of distributed generation used in combined heat and power applications to serve portions of customer electrical and thermal needs. Through these efforts, District staff determined that the Optional Metered Standby Service Charge currently included in several rate schedules could result in SMUD “under collecting” charges incurred to back up the distributed generators. The rate schedules include the General Service GS, General Service AG, Time-of-Use Commercial GS-TOU3, Medium General Service Time-of-Use GS-TOU2, and Large General Service Time-of-Use GS-TOU3.

Revenue Impact

There are a limited number of installed distributed generators in SMUD service territory that are required to pay the standby service charge so, the revenue impact has been insignificant thus far. However, it is possible that more customer-sited distributed generation used in combined heat and power applications will occur in the future because of the increased pressure to reduce greenhouse gas emissions and improve end-use energy efficiency. Properly designed and operated combined heat and power distributed generation systems can improve end use efficiency compared to traditional electric and natural gas services.

Secondly, since the current standby rates were adopted, capacity prices have had changes that necessitate a revision to the standby rates themselves.

Recommendation

Modify the following General Service and Time-of-Use standby charges as follows (additions and changes in italics and deletions as strikeouts):

For General Service GS, General Service AG, Time-of-Use Commercial GS-TOU3, Medium General Service Time-of-Use GS-TOU2, and Large General Service Time-of-Use GS-TOU3 rates, delete the following paragraph from VI.B Standby Service Option:

~~Optional Metered Standby Service Charge~~

~~The customer may elect to base the standby charge on actual metered generator output in relation to total site load, which may result in a different standby billing than one based on contract capacity. This option requires the customer to pay for the installation and monthly maintenance of special metering equipment at both the generator and the customer’s SMUD meter.~~

This option uses a metered standby kW instead of contract capacity kW to determine the standby service charge. The formula is as follows:

$$\text{metered standby kW} = (\text{maximum site kW}) - (\text{SMUD billing kW})$$

where:

“maximum site kW” is the highest coincident sum of the hourly generator output, if any, and the SMUD metered load for the billing period, and

“SMUD billing kW” is the maximum hourly load recorded at the customer meter during the previous 12 months.

Bill Impacts

Overview

The General Manager recommends a 9.5 percent increase to all rate classes effective September 1, 2009, and a 3.5 percent increase on January 1, 2011. The two increases combined will increase customer bills by an average of 13.3 percent by 2011.

Residential Bill Impacts

Residential Bill Impact Factors

The bill impacts reflect total revenue by residential rate groups with recommended restructuring at a customer rate class level. Individual bills will differ depending upon the customer's energy usage level. Customers in a lower energy usage range will experience an overall higher percent increase since the \$7 service charge is a higher proportion of their monthly bill. The table also reflects the General Manager's recommendations and revisions to the Energy Assistance (EA PR) discount program.

Changes to Residential Bills with Recommended Increases and Residential Restructure						
Customer Class	Annualized Average Monthly kWh	Current Bill per Month	Bill After First Step Increase	First Step Bill Change	Bill After Second Step Increase 2011	Second Step Bill Change
Residential Non Electric Heat*	750	\$ 77.88	\$86.22	\$8.34	\$89.24	\$3.01
Electric Heat**	865	\$87.90	\$96.65	\$8.74	\$100.02	\$3.37
Energy Assistance Program*	750	\$51.60	\$55.82	\$4.22	\$57.64	\$1.82

* based on standard rate RSG

** based on standard electric heat rate RSE

Following are bill impact examples for residential customers at four energy usage levels with the recommended first step increase (9.5 percent). Approximately a quarter of our residential customers fall in each of the energy usage ranges or “quartiles”:

- Quartile 1 1 to 450 kWh / month
- Quartile 2 451 to 700 kWh / month
- Quartile 3 751 to 1000 kWh / month
- Quartile 4 1000 + kWh / month

Nearly 50 percent of SMUD’s residential customers stay in the first energy usage billing tier (in quartiles 1 and 2, up to 700 kWh). Their bill impact would be greater than the other 50 percent of residential customers (in quartiles 3 and 4). The following bill impact examples are based on a customer whose energy usage falls within each of the quartile ranges.

Residential Bill Impacts by Energy Consumption Groupings *					
Energy Usage Quartile	Monthly kWh	Rates	Summer Bill	Winter Bill	Monthly Impact (\$)
Quartile 1	450	Current	\$46.81	\$43.75	
		New	\$52.00	\$48.67	\$5.06
Quartile 2	700	Current	\$70.03	\$70.19	
		New	\$77.00	\$78.02	\$7.40
Quartile 3	1000	Current	\$117.22	\$116.64	
		New	\$130.04	\$129.05	\$12.62
Quartile 4	2000	Current	\$291.82	\$276.64	
		New	\$306.84	\$299.15	\$18.77

* assuming Standard Residential Rate Code RSG, net of SB1 and HGA funding

Residential Bill Impacts with Assistance Discount by Energy Consumption Groupings*					
Energy Usage	Monthly kWh up to	Rates	Summer Bill	Winter Bill	Avg Monthly Impact (\$)
Quartile 1	450	Current	\$30.67	\$28.68	
		New	\$34.15	\$31.99	\$3.39
Quartile 2	700	Current	\$45.77	\$46.46	
		New	\$50.40	\$51.74	\$4.96
Quartile 3	1000	Current	\$78.80	\$78.98	
		New	\$87.53	\$87.46	\$8.61
Quartile 4	2000	Current	\$201.02	\$190.98	
		New	\$211.29	\$206.53	\$12.91

* assuming Standard Residential Rate Code RSG_E (EAPR discount), net of SB1 and HGA funding

Commercial Bill Impacts

Commercial/Industrial customers are billed for both energy (kWh) and capacity (demand). Following are sample summer bill calculations with the recommended first step increase (9.5 percent) for different size customers with varying load factors.

Sample Commercial Bill Impacts							
Class	Rate		Load Factor	Max Demand	Monthly kWh	Monthly Bill	Dollar Impact
Small Commercial	Standard	Current Rate				\$3,886	
		New	Low	199	30,400	\$4,262	\$376
		Current Rate				\$7,693	
		New	High	195	75,040	\$8,432	\$740
Commercial / Industrial	Small TOU	Current Rate				\$5,721	
		New	Low	343	25,760	\$6,267	\$546
	Medium TOU	Current Rate				\$33,684	
		New	High	652	287,233	\$36,896	\$3,212
	Large TOU	Current Rate				\$1,065,404	
		New	High	19,215	12,253,500	\$1,167,078	\$101,674

Changes to Rules and Regulations

Overview

To the Board of Directors, our customer-owners, and the interested public, this section presents the proposed changes to existing Rules and Regulations, effective September 1, 2009. The following is an overview of the changes. A detailed discussion, recommendation, and impact analysis is provided following this overview. The proposed changes include:

Wording to add the conditions of the Interconnection agreement to Rule 21 (21.C) – Adding words to Rule and Regulation 21 eliminates the need for a specific agreement for each PV installation in the net metering agreement.

19. Rule and Regulation 21 Customer-Owned Generation

Rule 21 currently only directs customers to Guidelines for interconnecting and operating customer-owned generation.

Purpose and Revenue Impact

Customers with facilities that generate electricity for partial supply to their on-site operations are required to sign an interconnection agreement with SMUD to ensure the safety of SMUD's distribution system and employees. Because it is difficult to maintain an agreement with the current owners of properties – particularly for residential properties – SMUD wishes to make the provisions of a standard interconnection agreement part of Rule 21.

There will be no revenue impact from this change.

Recommendations

The General Manager recommends adding Section C to Rule 21 as follows:

C. Provisions for Photovoltaic Electrical Interconnection of Residential Solar Generation Facilities.

1. OPERATIONS

Owners of qualifying facilities will design, install, operate and maintain the Facility in a manner consistent with the normal and safe operation of the electrical distribution system owned and operated by SMUD. The Facility is intended primarily to provide part or all of the Customer's own electrical energy requirements. Customer understands, accepts and agrees that connection and operation of the Customer's Facility shall be subject to the terms and conditions set forth in Rules 11 and 21.

2. CREDITS FOR NET ENERGY

Customer is eligible to receive credits for energy if Customer's monthly energy generated by the Facility exceeds Customer's monthly energy requirements, calculated by "Net Metering". Net Metering uses a meter or meters to measure the difference between the electricity supplied by SMUD and the energy generated by the Facility and supplied to SMUD. Net Metering account billing options, net energy carryover rules and restrictions and energy costs for the account which serves the Facility are controlled by SMUD's Service Rates Schedules in effect at the time of activation initially and as revised thereafter.

3. INTERRUPTIONS OR REDUCTION OF DELIVERIES

SMUD shall not be obligated to accept, and SMUD may require Customer to interrupt or reduce, deliveries of energy to SMUD: (a) when necessary in order to construct, install, maintain, repair, replace, remove, investigate or inspect any of SMUD's equipment or part of SMUD's system; or (b) if SMUD determines that curtailment, interruption or reduction of receipt of energy from Customer's Facility is necessary because of emergencies, forced outages, force majeure or compliance with prudent electrical practices.

Notwithstanding any other provisions of this section, if at any time SMUD, in its sole discretion determines that either (a) the Facility may endanger SMUD personnel or members of the general public, or (b) the continued operation of Customer's Facility may impair the integrity of SMUD's electrical distribution system, SMUD shall have the right to disconnect Customer's Facility from SMUD's electrical distribution system. Customer's Facility shall remain disconnected until such time as SMUD is satisfied that the condition(s) referenced in (a) or (b) of this paragraph have been corrected and SMUD shall not be obligated to compensate Customer for any loss of use of generation of energy during any and all periods of such disconnection.

4. CONDITIONS OF FACILITY OPERATIONS

Customer shall deliver energy from the Facility to SMUD at SMUD's meter.

Customer, and not SMUD, shall be solely responsible for all legal and financial obligations arising from the construction, installation, design, operation and maintenance of the Facility in accordance with all applicable laws and regulations.

Customer, at Customer's sole expense, shall obtain and possess all permits and authorizations in accordance with all applicable laws and regulations for the construction, installation, design, operation and maintenance of the Facility.

SMUD may meter, at its expense, the customer's energy usage using one or more meters.

Customer shall not connect the Facility, or any portion of it, to SMUD's distribution system, until Facility has passed SMUD inspection. Such approval shall not be unreasonably withheld. SMUD shall have the right to have representatives present at the initial testing of Customer's Facility.

Customer may reconnect its Facility to the SMUD system following normal operational outages and interruptions without notifying SMUD unless SMUD has disconnected service, or SMUD notifies customer that a reasonable possibility exists that reconnection would pose a safety hazard.

If SMUD has disconnected Service to the Facility, or SMUD has notified Customer that a reasonable possibility that reconnection would pose a safety hazard, Customer may call SMUD at 1-888-742-SMUD (7683) to request authorization to reconnect the Facility.

5. PHOTOVOLTAIC INTERCONNECTION DESIGN STANDARDS

Customer Facility, and all portions of it used to provide or distribute electrical power and parallel interconnection with SMUD's distribution equipment shall be designed, installed, constructed, operated and maintained in compliance with these provisions. Compliance with this section is mandatory unless prior written SMUD approval is provided for those specific items not in compliance. Exemptions shall be in writing, signed by SMUD and will amend these provisions.

Customer shall conform to applicable National Electric Code (NEC) Standards [NEC 690] and applicable building codes.

Customer shall have a dedicated circuit from the inverter to electrical service panel with a circuit breaker or fuse [NEC 690-64(b) (1)].

Customer's over-current device at the service panel shall be marked to indicate photovoltaic power source [NEC 690-64(b) (4)].

The Customer's inverter shall have the following minimum specifications for parallel operation with SMUD.

Inverter output shall automatically disconnect from SMUD source upon loss of SMUD voltage and not reconnect until SMUD voltage has been restored by SMUD [NEC 690-611].

Inverter shall meet the requirements of IEEE 1547, "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems" and Underwriters Laboratories (UL) 1741 "Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems."

6. MAINTENANCE AND PERMITS

Customer shall: (a) maintain the Facility and Interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, requirements of Section 5.0 above and (b) to the extent that future requirements may require, obtain any government authorizations or permits required for the operation of the Facility. Customer shall reimburse SMUD for any and all losses, damages, claims, penalties or liability SMUD incurs as a result of Customer's failure to obtain or maintain any government authorizations and permits required for construction and operation of the Customer's Facility.

7. ACCESS TO PREMISES

SMUD may enter Customer's premises without prior notice (a) to inspect at all reasonable hours Customer's protective devices and read or test any meter for the Facility and (b) to disconnect, at any time, without notice, the Facility if, in SMUD's sole opinion, a hazardous condition exists and that immediate action is necessary to protect persons, or SMUD's facilities or property of others from damage or interference caused by (1) Customer's Facility or (2) Customer's failure to comply with requirement of these provisions: and (c) monthly to read the bi-directional digital meter for billing purposes. Self-reads and reads from adjacent properties are not permitted.

8. INDEMNITY AND LIABILITY BY CUSTOMER

Customer shall indemnify and hold SMUD, its directors, officers, agents and employees harmless against all loss, damages, expense and liability to third persons for injury to, or death of persons or injury to property caused by the Customer's engineering, design, construction, installation, ownership, maintenance or operations of, or the making of

replacements, additions or betterments to or by failure of, the Facility in connection with these provisions by reason or omission or negligence, whether active or passive. Customer shall, on SMUD's request, defend any suit asserting a claim covered by the indemnity. Customer shall pay all costs that may be incurred by SMUD in enforcing this indemnity.

Nothing in these provisions shall be construed to create any duty to, any standard or care with reference to, or any liability to, any person not a Party to these provisions. Neither SMUD, its officers, agents or employees shall be liable for any claims, demands, costs, losses, causes or action, or any other liability of any nature or kind, arising out of the engineering,, design, construction, ownership, maintenance or operation of, or making of replacements, additions or betterment to, Customer Facility except to the extent actually caused by the sole and gross negligence of SMUD.

Neither SMUD, its officers, agents or employees shall be liable for damages of any kind to the Facility caused by any electrical disturbance of the SMUD system or on the system of another, whether or not the electrical disturbance results from the negligence of SMUD or not.

Detail of Rate Changes

September 1, 2009

Residential

Standard Rates

	General & Electric Heat	Closed Electric Heat
Service Charge	\$7.00	\$7.00
Energy - ¢/kWh		
Winter Tier I	9.24¢	7.17¢
Winter Tier II	17.01¢	13.71¢
Summer Tier I	9.99¢	9.99¢
Summer Tier II	17.63¢	17.63¢

Optional Time-of-Use Rates

	TOU Opt.1	TOU Opt.2
Service Charge	\$7.00	\$11.00
Energy - ¢/kWh		
Winter On-Peak	10.37¢	10.56¢
Winter Off-Peak	9.47¢	9.69¢
Summer Super-Peak	No Charge	23.32¢
Summer On-Peak	22.82¢	15.53¢
Summer Off-Peak	10.57¢	9.59¢

Power Choice Pilot Rates

	General & Electric Heat
Service Charge	\$8.25
Energy - ¢/kWh	
Winter Super-Peak	11.64¢
Winter On-Peak	10.56¢
Winter Off-Peak	8.22¢
Summer Super-Peak	25.29¢
Summer On-Peak	19.37¢
Summer Off-Peak	9.83¢

Swing Super-Peak	17.02¢
Swing On-Peak	14.43¢
Swing Off-Peak	9.00¢

Residential Thermal Energy Storage Option Rate

Energy - ¢/kWh

Winter On-Peak	None
Winter Off-Peak	2.31¢
Summer On-Peak	5.56¢
Summer Off-Peak	2.57¢

Discount off TOU Opt. 1

Residential Electric Vehicle Option Rate

Energy - ¢/kWh

Winter On-Peak	None
Winter Off-Peak	2.31¢
Summer On-Peak	None
Summer Off-Peak	2.57¢

Discount off TOU Opt. 1

Residential Standby Charge

Per kW based on contract capacity

Monthly

\$6.05

Residential Three-phase Service Option

Special Facilities

Monthly

\$37.50

Agricultural

Non-Demand Metered Rates (30 kW and below)

	Summer	Winter
Service Charge	\$9.55	\$9.55
Energy - ¢/kWh	11.53¢	10.53¢

Demand Metered Rates (Over 30 kW)

	Summer	Winter
Service Charge	\$23.00	\$23.00
Facilities Charge (per 12 months max kW or installed capacity)		
First 30 kW	No Charge	No Charge
Additional kW per month	\$2.20	\$2.20
Energy - ¢/kWh		
First 8,750 kWh per month	11.17¢	11.65¢
Over 8,750kWh per month	8.08¢	9.14¢

Non-Metered Time-of-Use

	Summer	Winter
Service Charge	\$12.70	\$12.70
Energy - ¢/kWh		
On-Peak	17.56¢	12.11¢
Off-Peak	9.44¢	10.31¢

Metered Time-of-Use

Summer	Winter
---------------	---------------

Service Charge	\$76.65	\$76.65
Demand Charge (\$/monthly super peak max kW)	\$3.10	\$2.20
Energy - ¢/kWh		
On-Peak	18.66¢	12.06¢
Off-Peak	9.94¢	10.25¢

Small Commercial

Non-Demand Metered Rates (20 kW & below)

	Summer	Winter
Service Charge	\$7.95	\$7.95
Energy - ¢/kWh	12.23¢	11.84¢

Demand Metered Rates (Over 20 kW)

	Summer	Winter
Service Charge	\$19.70	\$19.70
Facilities Charge (per 12 months max kW or installed capacity)		
First 20 kW	No Charge	No Charge
Additional kW per month	\$6.60	\$6.60
Energy - ¢/kWh		
First 7,300 kWh per month	12.19¢	11.05¢
Over 7,300 kWh per month	9.40¢	8.80¢

Small Commercial Time-of-Use

	Secondary	Primary
Service Charge	\$93.10	\$93.10
Facilities Charge (per 12 months max kW or installed capacity)	\$3.30	\$3.00
Demand Charge (\$/monthly super peak max kW)		
Summer Super-Peak	\$6.60	\$6.00
Energy - ¢/kWh		
Winter On-Peak	8.97¢	8.48¢
Winter Off-Peak	7.12¢	6.73¢
Summer Super-Peak	17.27¢	16.44¢
Summer On-Peak	11.80¢	11.38¢
Summer Off-Peak	9.38¢	8.94¢

Medium Commercial Time-of-Use

	Secondary	Primary	69kV
Service Charge	\$93.10	\$93.10	\$246.40
Facilities Charge (per 12 months max kW or installed capacity)	\$2.50	\$2.20	\$1.75
Demand Charge (\$/monthly super peak max kW)	\$6.00	\$5.50	No Charge
Energy - ¢/kWh			
Winter On-Peak	8.85¢	8.37¢	8.06¢
Winter Off-Peak	7.01¢	6.64¢	6.49¢
Summer Super-Peak	16.79¢	15.97¢	15.52¢
Summer On-Peak	11.56¢	11.15¢	10.45¢
Summer Off-Peak	8.89¢	8.46¢	8.33¢

Large Commercial Time-of-Use

	Secondary	Primary	69kV
Service Charge	\$93.10	\$93.10	\$246.40
Facilities Charge (per 12 months max kW or installed capacity)	\$3.45	\$3.30	\$2.65
Energy - ¢/kWh			
Winter On-Peak	9.27¢	8.83¢	8.50¢
Winter Off-Peak	7.35¢	6.88¢	6.72¢
Summer Super-Peak	14.45¢	11.92¢	11.59¢
Summer On-Peak	11.56¢	10.85¢	10.17¢
Summer Off-Peak	9.24¢	8.43¢	8.30¢

Commercial Power Choice Pilot Rates

20 kW & below

	Secondary
Service Charge	\$7.95
Facilities Charge (per 12 months max kW or installed capacity)	\$0.55
Energy - ¢/kWh	
Winter Super-Peak	12.45¢
Winter On-Peak	11.25¢
Winter Off-Peak	8.62¢
Summer Super-Peak	31.61¢
Summer On-Peak	19.24¢
Summer Off-Peak	10.37¢
Swing Super-Peak	20.01¢
Swing On-Peak	14.86¢
Swing Off-Peak	9.49¢

Over 20 kW

	Secondary
Service Charge	\$49.30
Facilities Charge (per 12 months max kW or installed capacity)	\$3.60
Energy - ¢/kWh	
Winter Super-Peak	11.64¢
Winter On-Peak	10.56¢
Winter Off-Peak	6.71¢
Summer Super-Peak	29.55¢
Summer On-Peak	17.99¢
Summer Off-Peak	8.00¢
Swing Super-Peak	18.70¢
Swing On-Peak	13.88¢
Swing Off-Peak	7.34¢

Temperature Dependent (Closed)

	69kV
Service Charge	\$246.40
Facilities Charge (per 12 months max kW or installed capacity)	\$0.50
TDP Demand Charge (\$/kW)	
Heat Storm	\$4.95
Extremely Hot	\$4.65
Very Hot	\$0.80
Hot	No Charge
Moderate/Mild	No Charge
Energy - ¢/kWh	
Winter On-Peak	8.50¢
Winter Off-Peak	6.10¢
Summer Super-Peak	11.59¢
Summer On-Peak	10.17¢
Summer Off-Peak	7.68¢

Commercial Standby Charge

Per kW based on contract capacity

Secondary	Primary	69kV
\$6.05	\$4.75	\$2.35

Power Factor Charges

Power Factor Adjustment, per excess kVar x kWh
Power Factor Waiver Amount, per excess kVar

Monthly

0.94¢
24.90¢

Street Lighting Service

Customer-owned and maintained

Energy - ¢/Watt Month

Monthly

2.29¢

Customer-owned, District maintained

Energy - ¢/Watt Month

Monthly

2.29¢

District-owned and maintained

Energy - ¢/Watt Month

Monthly

2.29¢

Traffic Signal Service (Closed)

<= 70 watts, <= 3 lamps
> 70 watts, > 3 lamps: charge per watt
> 70 watts, > 3 lamps: minimum charge

Monthly

\$3.35
1.89¢
\$3.35

Traffic Control, Intersection Lighting Service

Service Charge
Energy Charge

Monthly

\$3.05
8.56¢

Outdoor Lighting Service

Energy - ¢/Watt Month

Monthly

2.29¢

January 1, 2011

Residential

Standard Rates

	General & Electric Heat	Closed Electric Heat
Service Charge	\$7.25	\$7.25
Energy - ¢/kWh		
Winter Tier I	9.56¢	7.42¢
Winter Tier II	17.61¢	14.19¢
Summer Tier I	10.34¢	10.34¢
Summer Tier II	18.25¢	18.25¢

Optional Time-of-Use Rates

	TOU Opt 1	TOU Opt.2
Service Charge	\$7.25	\$11.40
Energy - ¢/kWh		
Winter On-Peak	10.73¢	10.93¢
Winter Off-Peak	9.80¢	10.03¢
Summer Super-Peak	No Charge	24.14¢
Summer On-Peak	23.62¢	16.07¢
Summer Off-Peak	10.94¢	9.93¢

Power Choice Pilot Rates

	General & Electric Heat
Service Charge	\$8.55
Energy - ¢/kWh	
Winter Super-Peak	12.05¢
Winter On-Peak	10.93¢
Winter Off-Peak	8.51¢
Summer Super-Peak	26.18¢
Summer On-Peak	20.05¢
Summer Off-Peak	10.17¢
Swing Super-Peak	17.62¢
Swing On-Peak	14.94¢
Swing Off-Peak	9.32¢

Residential Thermal Energy Storage Option Rate

	Discount off TOU Opt.
Energy - ¢/kWh	
Winter On-Peak	None
Winter Off-Peak	2.39¢

Summer On-Peak	5.75¢
Summer Off-Peak	2.66¢

Residential Electric Vehicle Option Rate

Energy - ¢/kWh	Discount off TOU Opt. 1
Winter On-Peak	None
Winter Off-Peak	2.39¢
Summer On-Peak	None
Summer Off-Peak	2.66¢

Residential Standby Charge

Per kW based on contract capacity	Monthly
	\$6.25

Residential Three-phase Service Option

Special Facilities	Monthly
	\$38.80

Agricultural

Non-Demand Metered Rates (30 kW and below)

	Summer	Winter
Service Charge	\$9.85	\$9.85
Energy - ¢/kWh	11.93¢	10.90¢

Demand Metered Rates (Over 30 kW)

	Summer	Winter
Service Charge	\$23.80	\$23.80
Facilities Charge (per 12 months max kW or installed capacity)		
First 30 kW	No Charge	No Charge
Additional kW per month	\$2.30	\$2.30
Energy - ¢/kWh		
First 8,750 kWh per month	11.56¢	12.06¢
Over 8,750kWh per month	8.36¢	9.46¢

Non-Metered Time-of-Use

	Summer	Winter
Service Charge	\$13.15	\$13.15
Energy - ¢/kWh		
On-Peak	18.17¢	12.53¢
Off-Peak	9.77¢	10.67¢

Metered Time-of-Use

	Summer	Winter
Service Charge	\$79.35	\$79.35
Demand Charge (\$/monthly super peak max kW)	\$3.20	\$2.30
Energy - ¢/kWh		
On-Peak	19.31¢	12.48¢
Off-Peak	10.29¢	10.61¢

Small Commercial

Non-Demand Metered Rates (20 kW & below)

	Summer	Winter
Service Charge	\$8.20	\$8.20
Energy - ¢/kWh	12.66¢	12.25¢

Demand Metered Rates (Over 20 kW)

	Summer	Winter
Service Charge	\$20.40	\$20.40
Facilities Charge (per 12 months max kW or installed capacity)		
First 20 kW	No Charge	No Charge
Additional kW per month	\$6.80	\$6.80
Energy - ¢/kWh		
First 7,300 kWh per month	12.62¢	11.44¢
Over 7,300 kWh per month	9.73¢	9.11¢

Small Commercial Time-of-Use

	Secondary	Primary
Service Charge	\$96.35	\$96.35
Facilities Charge (per 12 months max kW or installed capacity)	\$3.40	\$3.05
Demand Charge (\$/monthly super peak max kW)		
Summer Super-Peak	\$6.80	\$6.20
Energy - ¢/kWh		
Winter On-Peak	9.28¢	8.78¢
Winter Off-Peak	7.37¢	6.97¢
Summer Super-Peak	17.87¢	17.02¢
Summer On-Peak	12.21¢	11.78¢
Summer Off-Peak	9.71¢	9.25¢

Medium Commercial Time-of-Use

	Secondary	Primary	69kV
Service Charge	\$96.35	\$96.35	\$255.00
Facilities Charge (per 12 months max kW or installed capacity)	\$2.55	\$2.30	\$1.80
Demand Charge (\$/monthly super peak max kW)	\$6.25	\$5.70	No Charge
Energy - ¢/kWh			
Winter On-Peak	9.16¢	8.66¢	8.34¢
Winter Off-Peak	7.26¢	6.87¢	6.72¢
Summer Super-Peak	17.38¢	16.53¢	16.06¢
Summer On-Peak	11.96¢	11.54¢	10.82¢
Summer Off-Peak	9.20¢	8.76¢	8.62¢

Large Commercial Time-of-Use

	Secondary	Primary	69kV
Service Charge	\$96.35	\$96.35	\$255.00
Facilities Charge (per 12 months max kW or installed capacity)	\$3.60	\$3.40	\$2.70
Energy - ¢/kWh			

Winter On-Peak	9.59¢	9.14¢	8.80¢
Winter Off-Peak	7.61¢	7.12¢	6.96¢
Summer Super-Peak	14.96¢	12.34¢	12.00¢
Summer On-Peak	11.96¢	11.23¢	10.53¢
Summer Off-Peak	9.56¢	8.73¢	8.59¢

Commercial Power Choice Pilot Rates

20 kW & below

Secondary

Service Charge	\$8.25
Facilities Charge (per 12 months max kW or installed capacity)	\$0.60
Energy - ¢/kWh	
Winter Super-Peak	12.89¢
Winter On-Peak	11.64¢
Winter Off-Peak	8.92¢
Summer Super-Peak	32.72¢
Summer On-Peak	19.91¢
Summer Off-Peak	10.73¢
Swing Super-Peak	20.71¢
Swing On-Peak	15.38¢
Swing Off-Peak	9.82¢

Over 20 kW

Secondary

Service Charge	\$51.00
Facilities Charge (per 12 months max kW or installed capacity)	\$3.75
Energy - ¢/kWh	
Winter Super-Peak	12.05¢
Winter On-Peak	10.93¢
Winter Off-Peak	6.94¢
Summer Super-Peak	30.58¢
Summer On-Peak	18.62¢
Summer Off-Peak	8.28¢
Swing Super-Peak	19.35¢
Swing On-Peak	14.37¢
Swing Off-Peak	7.60¢

Temperature Dependent (Closed)

69kV

Service Charge	\$255.00
Facilities Charge (per 12 months max kW or installed capacity)	\$0.50
TDP Demand Charge (\$/kW)	
Heat Storm	\$5.10

Extremely Hot	\$4.80
Very Hot	\$0.85
Hot	No Charge
Moderate/Mild	No Charge
Energy - ¢/kWh	
Winter On-Peak	8.80¢
Winter Off-Peak	6.31¢
Summer Super-Peak	12.00¢
Summer On-Peak	10.53¢
Summer Off-Peak	7.95¢

Commercial Standby Charge

Per kW based on contract capacity

Secondary	Primary	69kV
\$6.25	\$4.90	\$2.45

Power Factor Charges

Power Factor Adjustment, per excess kVar x kWh

Power Factor Waiver Amount, per excess kVar

Monthly

0.97¢

25.77¢

Street Lighting Service

Customer-owned and maintained

Energy - ¢/Watt Month

Monthly

2.37¢

Customer-owned, District maintained

Energy - ¢/Watt Month

Monthly

2.37¢

District-owned and maintained

Energy - ¢/Watt Month

Monthly

2.37¢

Traffic Signal Service (Closed)

<= 70 watts, <= 3 lamps

> 70 watts, > 3 lamps: charge per watt

> 70 watts, > 3 lamps: minimum charge

Monthly

\$3.50

1.96¢

\$3.50

Traffic Control, Intersection Lighting Service

Service Charge

Energy Charge

Monthly

\$3.15

8.86¢

Outdoor Lighting Service

Energy - ¢/Watt Month

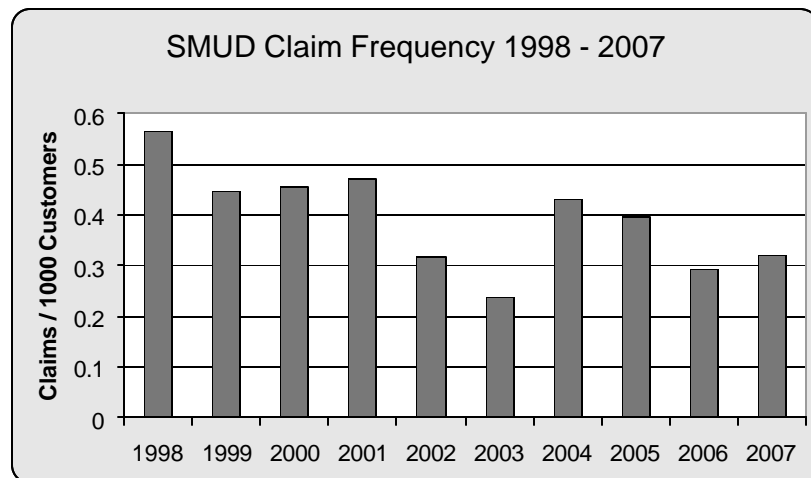
Monthly

2.37¢

Information on District Performance

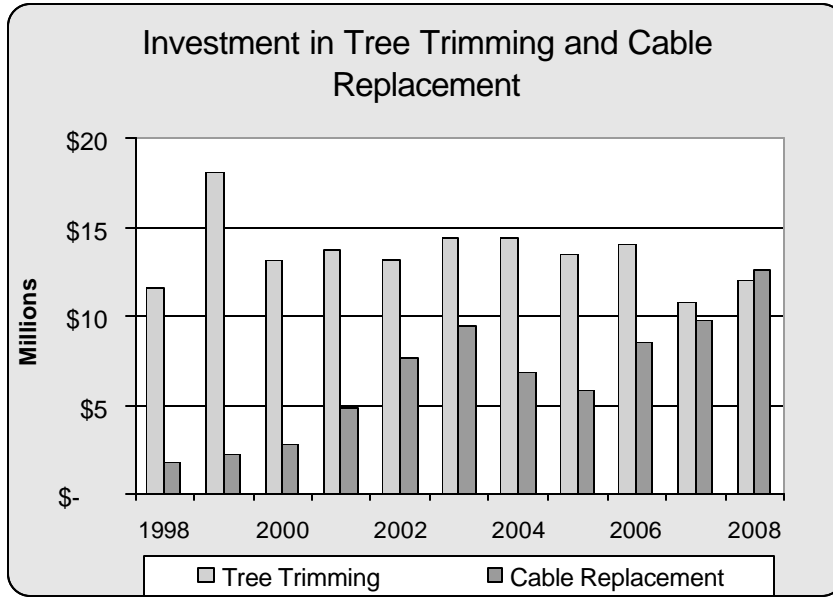
Improved efficiency, increased productivity and streamlined operations have helped SMUD maintain competitive rates. Since 2002, system load (energy) has increased by 11 percent and customer counts have increased by 51,000. During this period staffing levels remained the same. This demonstrated significant gains in productivity during this six-year span. During this same period, SMUD made notable strides in a variety of other areas including:

- Lowering the operating costs of our power plants through new contracts;
- New medical contracts that reduced the cost of out-of-state coverage for retirees;
- New meters that will be read electronically;
- Nuclear decommissioning under budget; and
- New financing structures for natural gas and wind.

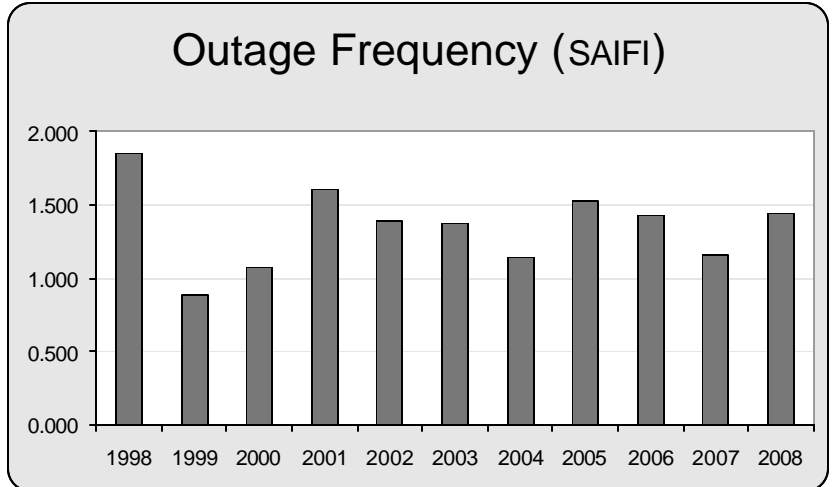


In the last five years, SMUD averaged 0.4 claims per 1,000 customers compared to 0.7 per 1,000 customers in prior years. Reduced claims can save SMUD as much as \$1 million per year.

Aggressive preventive maintenance in cable replacement and tree trimming: These proactive services have reduced customer outages and improved reliability.



Outage statistics: Statistics are reported as duration of outage and as the customer-weighted System Average Interruption Frequency Index (SAIFI). Since 1998, SAIFI statistics have fallen by 23 percent.



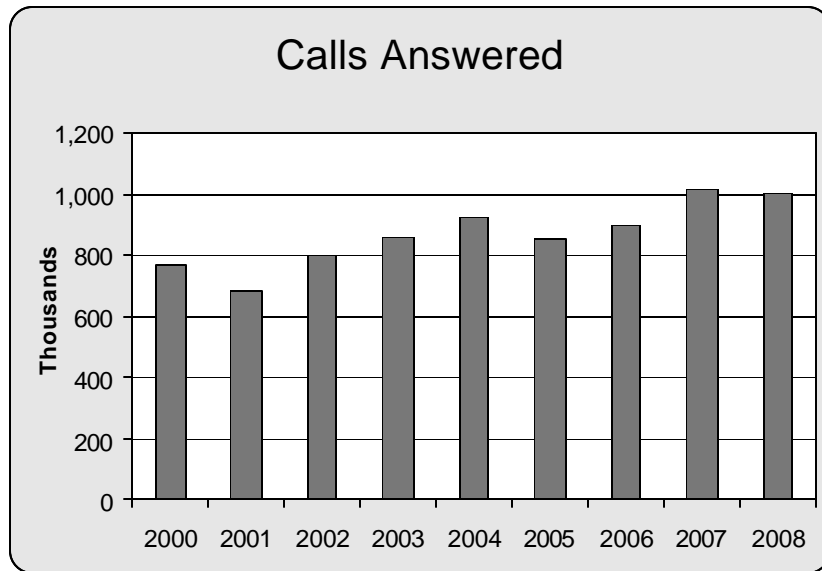
Enhanced service options: SMUD has improved service through both phone and Web site options including:

- Property manager portal;
- Interactive Voice Response (IVR) lower failure rate and higher satisfaction;
- Residential forums on heating/cooling and remodeling;
- Commercial portal;
- Electronic billing and payment;
- Move-in and move-out requests online;
- Usage history online;

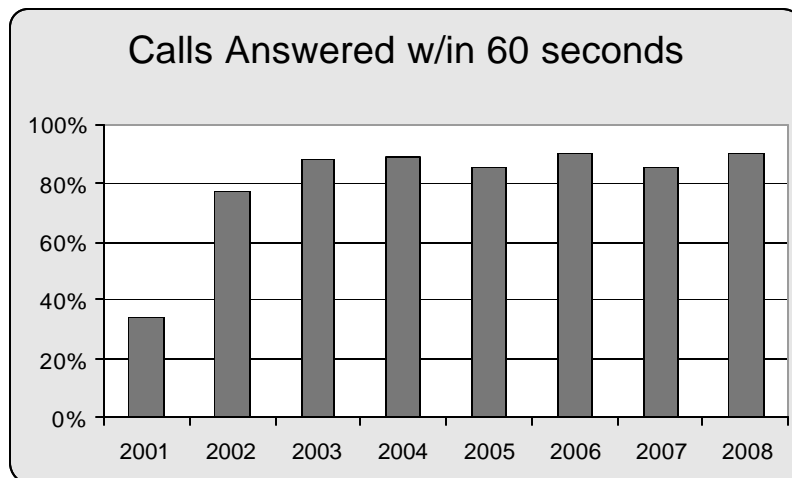
- Energy audit online;
- Online program signup; for example, Air Conditioning Load Management (ACLM), Greenergy, Home Power; and
- All-connect – referrals for extended services. This is a single site for connecting to multiple utilities on a new move-in.

Improved mapping and interactive documentation: Enhanced systems identify distribution lines and circuit configurations. (SDIT – implementation)

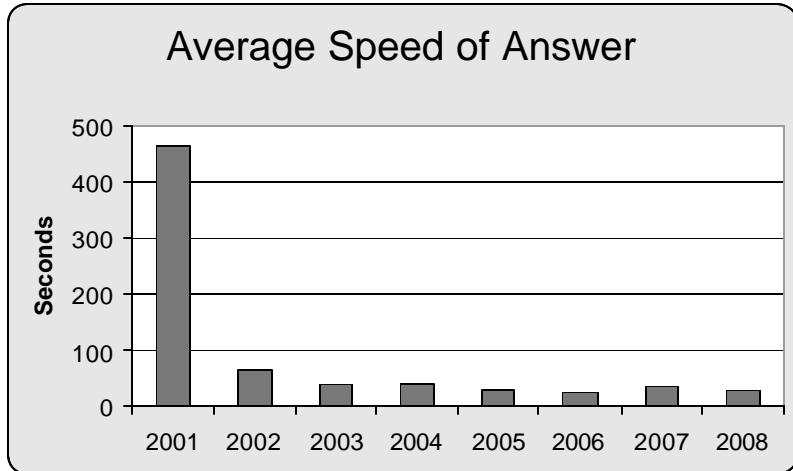
Customer service: The District’s customer service, measured by a variety of methods, shows a trend of improvement. The following graphs show some of these improvements:



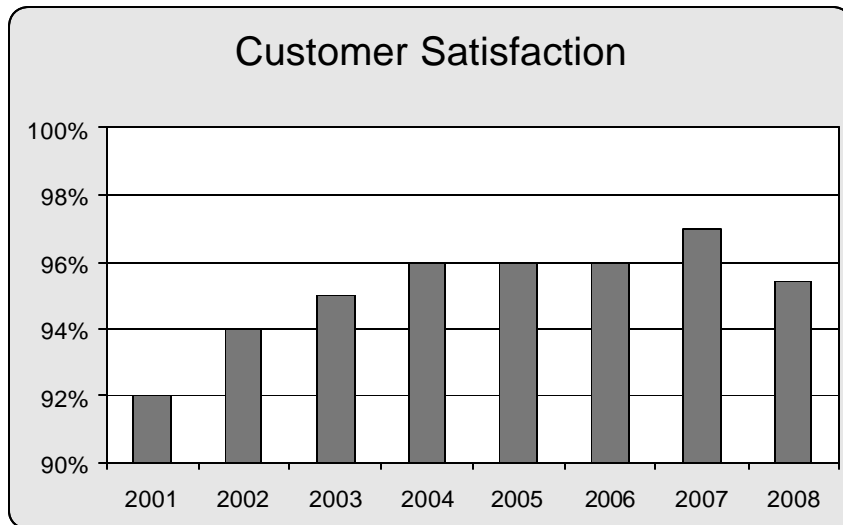
With answered call volumes increasing by 31 percent since 2001, calls answered within the first 60 seconds have improved from 34 percent in 2001 to an estimated 90 percent in 2008.



The average speed of calls answered has dropped from more than 450 seconds to an estimated 23 seconds in this same period.

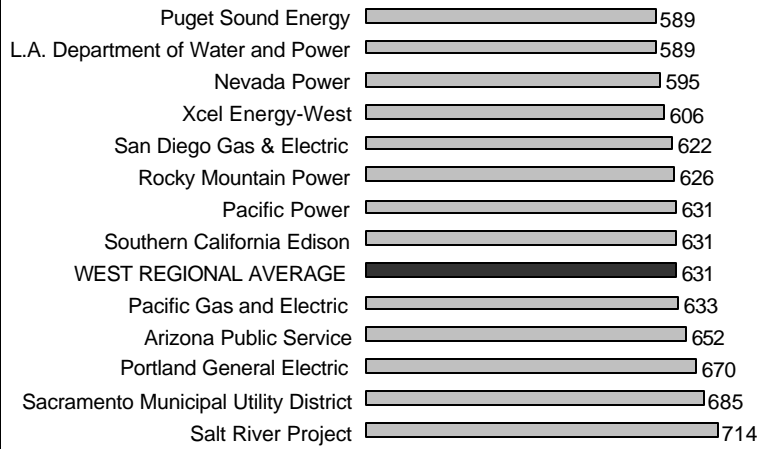


Customer Satisfaction: SMUD has worked on customers' satisfaction with a result approaching in the area of 96 percent satisfied in the most recent surveys. The satisfaction statistics include follow-up surveys on service requests such as troubleshooting problems, new connects and tree trimming services.



J.D. Power and Associates: Since 2000, SMUD has participated in the annual *Electric Utility Residential Customer Satisfaction Study* conducted by J.D. Power and Associates. This study ranks electric utilities from across the United States on a Customer Satisfaction Index and on five sub-components to the overall satisfaction index. SMUD has been ranked in the top five in the Western Region on the Customer Satisfaction Index since 2000. SMUD is currently ranked in the top five across the entire nation by both commercial and residential consumers.

**2008 Residential Study
West Region Customer Satisfaction Index**



Environmental Assessment

- 1.0 Section 21080(b)(8) of the California Public Resources Code and Section 15273 of the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq.) provide 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 purpose of:
 - (1) Meeting operating expenses, including employee wage rates and fringe benefits;
 - (2) Purchasing or leasing supplies, equipment, or materials;
 - (3) Meeting financial reserve needs and requirements;
 - (4) Obtaining funds for capital projects necessary to maintain service within existing service areas; or
 - (5) Obtaining funds that are necessary to maintain such intra-city transfers as are authorized by city charter.
- 2.0 Section 15061(b) (3) of the CEQA Guidelines provides that where it can be said with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.
- 3.0 The proposed action to increase the residential billing components for all rates and pilots by 9.5 percent effective September 1, 2009, and by 3.0 percent effective January 1, 2011, and increase the service charge by \$1.50 to \$7.00 per month, is for the purposes set forth in (1) through (4) of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.
- 4.0 The proposed action to increase all billing components all small commercial GSN and GSS rates and pilots by 9.5 percent effective September 1, 2009 and by 3.0 percent effective January y 1, 2011, is for the purposes set forth in (1) through (4)

of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.

- 5.0 The proposed action to increase all billing components of all medium commercial energy rates by 9.5 percent, effective September 1, 2009 and 3.0 percent effective January 1, 2011, is for the purposes set forth in (1) through (4) of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.
- 6.0 The proposed action to increase all billing components of all large industrial commercial, temperature dependent pricing (TDP), and economic development energy rates by 9.5 percent, effective September 1, 2009 and 3.0 percent on January 1, 2011, is for the purposes set forth in (1) through (4) of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.
- 7.0 The proposed action to increase all billing components of all agricultural (ASN, AON, ASD and AOD) energy rates by 9.5 percent effective September 1, 2009 and 3.0 percent effective January 1, 2011, is for the purposes set forth in (1) through (4) of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.
- 8.0 The proposed action to increase all lighting rates and service components by 9.5 percent effective September 1, 2009 and by 3.0 percent effective January 1, 2011, is for the purposes set forth in (1) through (4) of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.
- 9.0 The proposed action to increase the power factor adjustment, power factor waiver, standby charges, and residential multi-phase service by 9.5 percent effective September 1, 2009 and by 3.0 percent effective January 1, 2011, is for the purposes set forth in (1) through (4) of Section 1.0 of the Environmental Assessment. Therefore, this rate action is exempt from the requirements of CEQA.
- 10.0 It can be seen with certainty that there is no possibility that the proposed action to modify the SLS and NLGT Street Lighting and Outdoor Lighting tariffs, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 11.0 It can be seen with certainty that there is no possibility that the proposed action to maintain the Energy Assistance Program Rate service charge at \$3.50 per month, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 12.0 It can be seen with certainty that there is no possibility that the proposed action to modify the provisions of the Medical Equipment Discount Rate effective September 1, 2009, may

have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.

- 13.0 It can be seen with certainty that there is no possibility that the proposed action to establish a Feed-in Tariff (1-FIT-1 & 2) to provide customers with an opportunity to own or host an efficient small-scale generation plant and receive fair compensation for power output, for customer-sited distributed generation, effective January 1, 2010, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 14.0 It can be seen with certainty that there is no possibility that the proposed action to include plug-in hybrid electric vehicles (PHEV) and clarify the electric vehicle (EV) language in the EV rate, and modify the residential rate schedule, effective September 1, 2009, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 15.0 It can be seen with certainty that there is no possibility that the proposed action to create of a new tariff page Net Metering for Eligible Facilities (1-NM-1) to address the issues currently handled by individual net metering agreements with customers and increase the capacity limit on installation of new qualifying photovoltaic facilities to 5 MW, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 16.0 It can be seen with certainty that there is no possibility that the proposed action to simplify the qualification language for residential electric space heat tier allowances, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 17.0 It can be seen with certainty that there is no possibility that the proposed action to create of a new tariff page Solar Surcharge (1-SB1-1) to address the purpose of the solar surcharge, how it is calculated, and how it is limited, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 18.0 It can be seen with certainty that there is no possibility that the proposed action to permit reset of demand for Commercial Solar/Photovoltaic installations, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.
- 19.0 It can be seen with certainty that there is no possibility that the proposed action to eliminate the Optional Metered Standby Service charge, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.

20.0 It can be seen with certainty that there is no possibility that the proposed action to modify Rule 21 to add the provisions currently addressed by interconnection agreements, may have a significant effect on the environment. Therefore, this proposed action is not subject to CEQA.

Energy Conservation Tips and Links

To help customers manage their energy costs in the face of a rate increase, SMUD provides information and resources on how to lower energy use. Some examples of these actions include:

Replacing incandescent bulbs with compact fluorescent lamps (CFLs).

Replacing the five bulbs used most frequently in your house with CFLs will save about \$60 per year. New technology CFLs last up to 10 times longer than incandescent bulbs, use only 30 percent of the energy, and produce significantly less heat than incandescent lights.

Lowering the thermostat setting of central heating systems. Reducing the thermostat setting from 68 to 60 degrees overnight can save up to \$13 per month for a gas furnace and \$10 per month with an electric heating system. Also lowering the thermostat just 2 degrees (for example, from 70 to 68 degrees) will save about 5 percent off the costs of heating your home.

Changing the filter on your central heating/cooling system at least once a month to keep the system operating at peak efficiency.

Unplugging a spare refrigerator or freezer located in the garage. This can lower the average residential bill by up to \$16 per month. If a customer is storing an unused refrigerator or freezer in the garage, they should be sure to remove all doors to prevent accidental suffocation.

Replacing refrigerators that are 10 or more years old. *Energy Star* models can save about \$8 per month over the older appliances.

Running washing machines and dishwashers with full loads. This can reduce an average monthly electric bill by as much as \$7.

Upgrading or installing weather stripping and caulking every five years. This will increase the comfort level in the home and lower electric bills by as much as \$5 per month.

Installing a water-heater blanket on your water heater. Some newer water heaters have insulation already incorporated into the unit and may not need an external blanket, so check the owner's manual first.

Programs and Links

Additional information and assistance is available through the following links.

Save Today, Save Tomorrow

<http://www.smud.org/en/savetoday/pages/index.aspx>

Promotions, Rebates and Financing

<http://www.smud.org/en/rebates/Pages/index.aspx>

SMUD has promotions and rebates to help our customers save energy and money. For example, SMUD buys down the cost of electric appliances and products to encourage energy efficiency.

Stay Warm, Save Energy and Money

<http://www.smud.org/en/residential/conservation-tips/pages/index.aspx>

Greenergy®

Through its Greenergy® program, SMUD offers you the choice of supporting energy created by green resources.

<http://www.smud.org/en/community-environment/greenergy/pages/index.aspx>

Calculate Your Carbon Footprint

SMUD's carbon offset program provides you with an opportunity to neutralize the carbon dioxide emissions produced during a number of daily activities — driving a car, using the air conditioner, turning on household lights, or taking a trip on a plane.

<http://www.smud.org/en/community-environment/carbon-offset/pages/index.aspx>

Peak Corps

Peak Corps is a voluntary program of customers who help SMUD reduce electric load and maintain system reliability during system or electrical emergencies. Peak Corps members allow SMUD to install a cycling device and switch-off (or cycle) their central air conditioners periodically between June 1 and September 30.

<http://www.smud.org/en/residential/peak-corps/pages/index.aspx>

Free Shade Trees

If your home has an eastern, western or southern exposure that heats up during the summer, you may be eligible to receive free trees from SMUD.

<http://www.smud.org/en/residential/trees/pages/index.aspx>

OurGreenCommunity.org

SMUD is underwriting OurGreenCommunity.org, a Web site developed to help improve the quality of life by providing a forum for area residents, groups and businesses to share ideas about reducing the impact of carbon emissions from all sources. Visit and join in the conversation, at **OurGreenCommunity.org**.

Strategic Directives

These Strategic Directives have been adopted by resolution of the Board of Directors to set forth the core values and strategic framework for the District. Note: Strategic Directives are grouped by Core Values and Key Values, so numbering will not be sequential.

SD-1A Purpose Statement

SMUD's purpose is to provide solutions for meeting our customers' electrical energy needs.

SD-1B Vision Statement

SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region.

In implementing this vision, SMUD will adhere to these principles:

- a) Preserve our customers' quality of life by offering flexibility and options;
- b) Enable customers to use both active and passive means to achieve these goals;
- c) Enable all customers to participate;
- d) Collaborate, as appropriate, with partners who share SMUD's goals;
- e) Focus on investing in energy efficient infrastructure for both SMUD and customer facilities;
- f) Use a comprehensive communication strategy;
- g) Leverage SMUD's leadership role to achieve these goals.

Core Values

SD-2 Competitive rates –

Maintaining competitive rates is a core value of the SMUD.

Therefore:

- a) The Board establishes a rate target of at least 10 percent below Pacific Gas & Electric Company's published rates for each customer class.
- b) In addition, SMUD's rates shall be designed to balance and achieve the following goals: i) Reflect the cost of energy when it is used; ii) Reduce use on peak; iii)

Encourage energy efficiency and conservation; iv) Minimize “sticker” shock in the transition from one rate design to another; v) Offer flexibility and options; vi) Be simple and easy to understand; vii) Meet the needs of people with fixed low incomes and severe medical conditions; and viii) Equitably allocate costs across customer classes.

c) SMUD will work with owners, renters and landlords, as well as with local jurisdictions, in implementing this policy.

SD-3 Access to credit markets –

Maintaining access to credit is a core value of SMUD. Therefore, SMUD shall comply with all bond indenture requirements and develop budgets in a fiscally sound manner.

Therefore:

- a) For SMUD’s annual budgets, the Board established a target of cash coverage of all debt service payments (fixed charge ratio) of 1.3 to 1.5 times.
- b) SMUD’s electric system, employees and board members shall be reasonably insured against risks and claims of liability.

SD-4 Reliability –

Meeting customer energy requirements is a core value of SMUD.

Therefore:

- a) SMUD will assure all customer energy requirements are met. This will be accomplished through the use of: (i) its generation resources and purchase power portfolio 100 percent of the time; and (ii) its transmission assets to assure an overall availability of at least 99.99 percent.
- b) SMUD will achieve distribution system reliability by limiting the average frequency of outages to 1.16 or less per customer per year and by limiting the average duration of outages to less than 80.4 minutes per customer per year with no individual circuits exceeding these targets for more than two consecutive years.
- c) SMUD will maintain the electric system in good repair and make the necessary upgrades to maintain load serving capability and regulatory standards.

SD-5 Customer relations –

Maintaining a high level of customer relations is a core value of SMUD. Therefore, the Board establishes an overall customer satisfaction target of 95 percent with no individual component measured falling below 85 percent.

As part of this policy:

- a) SMUD customers shall be treated in a respectful, dignified and civil manner.
- b) SMUD shall communicate a procedure for customers who believe they have not received fair treatment from SMUD to be heard.

SD-6 Safety –

Creating a safe environment for workers and customers is a core value of SMUD. Therefore, the Board is committed to meeting all applicable laws and regulations, continuous safety improvement, and establishes a target to reduce 2006 SMUD safety incident rates by 40 percent by 2013.

SD-7 Environmental Protection –

Environmental leadership is a core value of SMUD. The Board is committed to environmental leadership through community engagement, continuous improvement in pollution prevention, carbon reduction, energy efficiency, and conservation.

Therefore:

- a) SMUD will conduct its business affairs and operations in a manner that reduces adverse environmental impacts, reduces pollution, and enhances resource conservation and stewardship.
- b) SMUD will provide leadership in the reduction of the region’s total emissions of greenhouse gases through proactive programs in all SMUD activities and development and support of national, State, and regional climate change policies and initiatives.
- c) SMUD will promote the efficient use of energy by its customer-owners.
- d) SMUD will proactively engage its customer-owners and other stakeholders in meeting this directive.

SD-8 Employee Relations –

Developing and maintaining a high quality, inclusive workplace that engages and inspires employees to commit to SMUD’s purpose, vision and values is a core value of SMUD.

Therefore:

- a) SMUD shall foster trust, innovation, open communication, and accountability in its workforce.
- b) SMUD shall build, foster and sustain a work environment that encourages inclusion of different viewpoints, approaches, backgrounds, where employees are valued and respected.
- c) SMUD shall engage its workforce in personal and professional development.
- d) SMUD shall engage its workforce to:
 - i) Understand and actively support SMUD’s purpose, vision and values;
 - ii) Work with the community to support SMUD’s purpose, vision and values.
- e) SMUD’s workforce shall reflect the broader values and interests of the community and its customer-owners.
- f) SMUD shall maintain and communicate written policies that define procedures and expectations for staff and provide for effective handling of grievances.
- g) Annually, and consistent with State and Federal law, the Board shall receive a report detailing the demographics of the SMUD workforce, the available workforce, and the Sacramento region.

SD-9 Resource Planning –

It is a core value of SMUD to provide its customer-owners with a sustainable power supply through the use of an integrated resource planning process.

A sustainable power supply is defined as one that reduces SMUD’s long-term greenhouse gas emissions from generation of electricity to 10 percent of its 1990 carbon dioxide emission levels by 2050 (i.e. - <350,000 metric tonnes/year), while assuring

reliability of the system; minimizing environmental impacts on land, habitat, water quality, and air quality; and maintaining a competitive position relative to other California electricity providers.

Accordingly, the Board establishes the following near-term goals to guide SMUD in its resource evaluation and investment:

a) First acquire cost-effective, reliable and feasible energy efficiency and demand reduction resources. Set a goal of reducing energy consumption by 15 percent by 2018 with annual targets of:

Year	Gigawatt Hours	Megawatts
2008	107	28
2009	145	40
2010	196	58
2011	200	59
2012	205	60
2013	209	62
2014	213	63
2015	217	64
2016	222	66
2017	226	67
Total	1,940	568

Review and revise the annual targets every three years.

b) Emphasize local and regional environmental benefits.

c) Lower the cost to serve our customers by reducing per customer peak usage.

d) Provide dependable renewable resources to meet 20 percent of SMUD’s load by 2010, and 33 percent of its load by 2020, thus contributing to the statewide RPS standard.

e) Promote cost effective, clean distributed generation through SMUD programs . As part of this policy, SMUD shall continue to be a leader in solar power.

SD-11 Local control –

Support for public power and preservation of local decision-making and control are core values of SMUD. Community-owned utilities are primarily accountable to customers-owners, not stockholders. Community citizens have a direct voice in utility decisions.

Preservation of local decision-making and control are vital to ensure public power systems can provide solutions that best meet the needs of their customers.

SD-12 Ethics –

Maintaining the public trust and confidence in the integrity and ethical conduct of the Board and District employees is a core value of the District. Therefore, to ensure the public interest is paramount in all official conduct, the Board shall adopt and update, as necessary: a Conflict of Interest Code as required by State law. The District shall also maintain and enforce a code of ethics applicable to all employees.

Among other things the code of ethics shall:

- a) Require high ethical standards in all aspects of official conduct;
- b) Establish clear guidelines for ethical standards and conduct by setting forth those acts that may be incompatible with the best interests of the District and the public;
- c) Require disclosure and reporting of potential conflicts of interest; and
- d) Provide a process for reporting and investigating suspected violations of the code of ethics.

SD-16 Information Management and Security Policy –

Proper management of District information is a core value of the District. Consistent information management practices are critical to reduce the risk of legal liability, regulatory noncompliance, natural disaster recovery, criminal activity, theft of critical resources, and to assure customer satisfaction. The District shall take reasonable measures to ensure:

- a) Information Security: The protection of District information (confidential, proprietary, and intellectual property) and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction;
- b) Customer Privacy: Maintaining the confidential nature of customer information that is proprietary or relates to customer privacy interests, including social security numbers, addresses, phone numbers, birth dates, and specific billing, credit and energy usage information; provided however, customer privacy shall not extend to aggregate information regarding the usage, load shape or other general characteristics of a group or rate classification. Release of customer information is permissible as reasonably necessary to meet the District’s business interests (e.g., collection of unpaid bills or debts, reporting to credit agencies, exchange of customer information with other utilities for collection purposes or determinations of creditworthiness, or cooperation with law enforcement).
- c) Records Management: The efficient and systematic control of the creation, capture, identification, receipt, maintenance, use, disposition, and destruction of District records, in accordance with legal requirements and Board policies.

Key Values

SD-10 Research and development –

To assure SMUD’s long-term competitiveness and its ability to deliver innovative products and services, SMUD shall invest in research and development projects that support its core and key values, based on an analysis of the projects’ relative risks and their potential benefits to SMUD customers.

SD-13 Economic Development –

Promoting local and regional economic benefits is a key value of the District. Therefore, the District shall assist in retaining, recruiting and growing rate-paying businesses in order to build and maintain a healthy and inclusive commercial and industrial customer base that benefits all customer classes. The District shall emphasize assistance to businesses that promote energy efficiency, advanced renewable technologies, and environmental protection.

Therefore, the District shall:

- a) Promote the development and growth of small and emerging businesses.
- b) Partner with local and regional organizations in collaborative efforts.

- c) Develop enhanced rates and new service incentives.
- d) Support the Sacramento Region Blueprint Transportation and Land Use Study planning principles and preferred growth scenario.

SD-14 System Enhancement –

As a community-owned utility, SMUD recognizes that the relocation or underground placement of primary voltage power lines may be desirable to local jurisdictions to improve aesthetics, economic vitality, safety and disabled access. Therefore, it is a key value of the District to make selected distribution system enhancements, such as relocation or underground placement of primary power lines below 69 kV.

- a) The District will, at its expense and where technically feasible, relocate or underground existing overhead distribution facilities provided the governing body of the city or county in which the electric facilities are and will be located has: i) Identified, after consultation with SMUD, a specific system enhancement project; ii) Determined the project is in the public interest; iii) Ensured all existing overhead communication facilities related to the project will also be relocated or placed underground; iv) Obtained and provided SMUD with all easements necessary for the project.
- b) After achievement of core financial targets, the District will annually commit up to one-half of one percent of its annual gross electric sales revenue to system enhancements. The proposed projects will be subject to the District's annual budget approval process, and uncommitted funds from any given year will not be carried over to future years. Funding will be assigned to projects brought forward by local cities or counties based on applying the following criteria (not in order of preference): i) Project scale and/or cost when measured against available District resources. ii) Requesting entity has developed full scope, obtained all necessary easements, and development plan for customer service conversion from overhead to underground, as required. iii) Extent to which the costs are borne by others.

SD-15 Outreach and Communication –

Providing broad outreach and communication to SMUD's customers and the community is a key value of the District.

Specifically:

- a) The District shall engage in regular outreach and communication with customers, owners, the community, and other interested stakeholders. This communication shall be designed to ensure that these various groups are informed about SMUD's major decisions and programs. SMUD will leverage existing community forums to the extent possible.
- b) SMUD external communications and community outreach activities shall reflect the ethnic and cultural diversity of the District. The District shall use a diverse mix of communication channels to reach all customer segments.
- c) The effectiveness of these communications shall be measured through the level of awareness achieved. The District shall seek to maintain program awareness levels of at least 50 percent among each residential group.

Glossary of Terms

AMI

Advanced Metering Infrastructure refers to systems that measure, collect and analyze energy usage through various communication media on request or on a pre-defined schedule. This infrastructure includes hardware, software, communications, customer associated systems and meter data management (MDM) software.

Load Factor

The ratio of the average load supplied during a designated period to the peak load occurring in that period, in kilowatts.

Carbon Footprint

A measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide.

Carbon Offset

A conceptual tool in response to carbon footprints are carbon offsets, or the mitigation of carbon emissions through the development of alternative projects such as solar or wind energy or reforestation.

Combined Heat & Power (CHP)

CHP is the process of capturing waste heat from generation sources for secondary purposes.

Claim

A request, to or from the District, for moneys to resolve issues regarding damaged property or other obligations.

Conservation signal

Pricing of power to reflect the underlying cost of service and encourage energy conservation. This is typically done using higher summer pricing and time-of-use rates.

Core values

SMUD's core values are part of the Board's Strategic Direction and are a component of all solutions for meeting our customers' electrical needs. SMUD core values include competitive rates, reliability, access to credit markets service reliability, customer relations, safety, environmental protection, employee relations, local control and ethics.

Credit Markets

A financial market where participants buy and sell debt securities, usually in the form of bonds.

Distributed Generation

Distributed generation, also called on-site generation, decentralized generation, decentralized energy or distributed energy, generates electricity from many small energy sources. Distributed energy resource (**DER**) systems are small-scale power generation technologies (typically in the range of 3 to 10,000 kW) used to provide an alternative to or an enhancement of the traditional electric power system.

Dollar cost averaging

The practice of investing a fixed dollar amount at regular intervals (such as monthly) in a particular investment or portfolio, regardless of its share price. In this way, more shares are purchased when prices are low and fewer shares are bought when prices are high.

Energy Star

A United States government program to promote energy efficient consumer products.

Feed-in Tariff

A Feed-in Tariff (FIT) is an incentive structure to encourage the adoption of renewable energy. The electricity utilities offer, or in some instances are obligated, to buy renewable electricity (electricity generated from renewable sources such as solar photovoltaic, wind power, biomass and geothermal power) at prices set to encourage development of small renewable generation.

Fixed Charge Coverage or Fixed Charge Ratio

The number of times the interest (on bonds and long-term debt) and lease expenses can be covered by the indebted firm's earnings (revenue).

GHG – Greenhouse Gases

Greenhouse gases are gases in an atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the "greenhouse effect." Greenhouse gases are essential to maintaining the current temperature of the earth; without them this planet would be so cold as to be uninhabitable.

Key values

Key values, part of the Board's Strategic Direction, define SMUD's course of action regarding resource planning, research and development, economic development and system enhancement.

Load Factor

The ratio of the average load supplied during a designated period to the peak load occurring in that period, in kilowatts.

Portal

A site that provides a single function via a Web page or site. Web portals often function as a point of access to information on the World Wide Web.

Quartile

Any of the three values that divide the sorted data set into four equal parts, so that each part represents one-fourth of the sampled population.

Rate Stabilization Fund

This fund has been maintained by SMUD to reduce the impact of seasonal or weather-related swings in power supply costs.

Regulatory Costs

Costs associated with compliance to government, both state and federal regulation. For example, costs from mandated requests from the California Public Utility Commission (CPUC), California Energy Commission (CEC) and Federal Energy Regulatory Commission (FERC) as well as other governmental entities.

Reliability Targets

These are targets for SAIDI and SAIFI statistics established by the Board of Director's Reliability Policy, Strategic Directive 4. (SD-4)

Renewable Energy

Renewable energy is energy generated from natural resources—such as sunlight, wind, rain, tides and geothermal heat—which are renewable (naturally replenished).

Renewable Portfolio Standard (RPS)

RPS is a regulatory policy that requires the increased production of renewable energy sources such as wind, solar, biomass, and geothermal energies. The RPS mechanism generally places an obligation on electricity supply companies to produce a specified fraction of their electricity from renewable energy sources.

SAIDI frequency statistics

System Average Interruption Duration Index (SAIDI) is an index that measures electric system reliability, or the frequency of electric service outages per customer on an annual basis.

SAIFI frequency statistics

System Average Interruption Frequency Index (SAIFI) is an index that measures electric system reliability, or the frequency of electric service outages per customer on an annual basis.

SB 1

California State Senate Bill 1 (SB 1) provides a long-term commitment and more than \$3.35 billion in funding to leverage private investment to deploy 3,000 MW of solar power systems on residential, commercial and government buildings throughout the state.

Secondary Service

For SMUD, secondary service is defined as service taken at 4,160 kV, or lower.

Tariff

A schedule of rates or charges of a business or a public utility.

Tier

A block of kWh sold at a specified price. The blocks are stacked (tiered) and typically the price is higher as the tiers go up. The result is as the usage increases, the price per kWh increases.

Upper American River Project (UARP)

The Upper American River Project is the series of 11 reservoirs and eight powerhouses that supply nearly 15 percent of the electricity needs of SMUD customers.

Appendix A

Feed-In Tariff (FIT) for Distributed Generation

I. Applicability

This Schedule is optional for customers who wish to sell to SMUD the power output from an eligible small-scale Distributed Generation Resource as defined in the General Conditions section of this Schedule.

Service under this schedule is on a first-come, first-served basis until the combined rated generation capacity within SMUD's service territory reaches 100 MW.

II. Territory

This Schedule is available to the entire service territory.

III. General Conditions

1. REQUIRED CONTRACT

Distributed generation resources accepting service under the tariff shall execute a power purchase agreement (PPA) with SMUD.

2. DURATION OF TERM:

The tariff shall be offered for contract durations of 10-, 15- or 20-years at the option of the customer.

3. PARTICIPATION IN OTHER SMUD PROGRAMS

Customers taking service under this Schedule may not also obtain benefits from any of the following:

- a. A power purchase agreement with SMUD for deliveries from the same facility;
- b. Incentives from SMUD under customer programs implemented in compliance with SB 1 requirements or similar program; or
- c. The net metering option for energy deliveries from the same facility.

4. ENVIRONMENTAL ATTRIBUTES

A distributed generation resource accepting service under this tariff will deliver to SMUD both the energy generated and any environmental attributes associated with that energy.

5. DEFINITIONS

The following definitions apply to this Schedule:

- a. Eligible Renewable Generation Resource – An electric generating facility as defined in Public Utilities Code Section 399.12 and California Public Resource Code Section 25741, as either code provision may be amended or supplemented from time to time.
- b. Eligible Combined Heat and Power (CHP) Resource – An electric generation facility that produces both electricity and thermal energy from a single fuel input. An eligible CHP system shall meet an emissions rate standard of 0.07 pounds of nitrogen oxides (NOx) per MWh. It must also meet a minimum efficiency of 60 percent, measured as useful energy output divided by fuel input at 100 percent of generator load.

Sheet No. 1-FIT-1

An eligible CHP system that meets both these efficiency and NOx standards may take an emission credit at the rate of one megawatt-hour for each 3.4 million British thermal units of heat recovered. To remain eligible, the CHP system shall be adequately maintained and serviced to continue meeting or exceeding the efficiency and emissions standards during its operation.

6. ELECTRICAL INTERCONNECTION

Distributed generation resources receiving service under this Schedule shall be interconnected within SMUD’s service territory and shall be required to comply with SMUD’s Rule 21 process for interconnection. Any resources not meeting the Rule 21 requirements will **not** be eligible for service under this Schedule.

7. METERING REQUIREMENTS

Distributed generation resources receiving service under this Schedule shall comply with all applicable rules in installing a meter appropriate for full buy/sell or excess sale agreements, and which can be read daily by electronic means acceptable to SMUD. The customer shall be responsible for procuring and maintaining any communication link required by SMUD for retrieving meter data.

V. Distributed Generation Feed-In Tariff Cost Components

Under this Schedule, SMUD will pay the eligible distribution generator the applicable price for metered energy delivered during the time periods specified for the chosen contract term and start year. The start year is the calendar year when actual commercial operation begins.

The FIT prices will be posted on the SMUD Web site (smud.org), with prices differentiated by

- Project start date;
- Contract term; and
- Time-of-delivery (TOD).

The FIT prices reflect SMUD’s underlying marginal costs for procurement and delivery of comparable power during the specified terms and time periods.

For customers with CHP generation facilities, the FIT prices for energy delivered to SMUD will be based on the following cost components:

- Market Energy Price including losses
- Ancillary Services
- Generation Capacity
- Transmission
- Sub-Transmission Capacity

For customers with eligible renewable generation facilities, the FIT prices for energy delivered to SMUD will include the above cost components and the following additional premiums :

- Projected cost offsets associated with avoided greenhouse gas mitigation.
- Estimates of risk avoidance from future natural gas price increases.

VI. Time -of-Delivery Periods

The time periods specified in this Schedule correspond to the following definitions:

Time of Delivery	Months	Super Peak	On Peak	Off Peak
Summer	June - Sept	2:00 to 8:00 p.m. Mon – Sat except holidays	6:00 a.m. to 2:00 p.m. & 8:00 p.m. to 10:00 p.m. Mon - Sat except holidays	All other hours
Fall & Winter	Oct - Feb			
Spring	Mar - May			
Holidays	New Years, July 4 th , Memorial Day, Labor Day, Thanksgiving, Christmas			

Sheet No. 1-FIT-2

Appendix B

Net Metering for Qualifying Facilities Solar Electric, Wind Turbine and Biomass

I. Applicability

The net metering option applies to residential, small commercial, commercial, industrial, or agricultural customers who have a solar or wind electrical generation facility, or a hybrid system of both, or biomass with a capacity of not more than 1000 kilowatts. The facility must be located on the customer's premises, operate in parallel with the District's transmission and distribution facilities, and must be intended primarily to offset part or all of the customer's own electrical requirements. Application for this option is on a first-come, first-served basis. The customer must meet all requirements of Rule 21.

II. Metering

RESIDENTIAL AND SMALL COMMERCIAL < 20 kW (< 30 kW for Agricultural Customers)
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. For SMUD-supplied photovoltaic (PV) systems, an additional meter for PV generation will be supplied as part of the system package.

LARGE COMMERCIAL > 20 kW (>30 kW for Agricultural Customers) 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. The customer may be required to pay the cost differential between standard metering and bi-directional metering. For SMUD-supplied photovoltaic (PV) systems, an additional meter for PV generation will be supplied as part of the system package.

III. Standby Charges

Customers who qualify for Net Metering are exempt from standby charges on that portion of their load.

IV. Annualized Payment/Settlement Method

If during any normal monthly billing cycle, the energy supplied by SMUD is greater than the energy supplied to SMUD by the Customer's PV system, the Customer will receive a bill as prescribed by the applicable Standard Rate schedule, for the net kWh supplied by SMUD, but in no case less than the minimum bill under the Standard Rate. If in any normal billing month the energy supplied by SMUD is less than the energy supplied to SMUD by the Customer's PV system, the Customer will receive credit for the excess electricity supplied to SMUD applied to other bill components.

RESIDENTIAL AND SMALL COMMERCIAL < 20 kW (< 30 kW for Agricultural Customers)
For these customers, payment of any balance due on a monthly bill is not required and at the end of 12-months participation on Net Metering, a settlement bill will be calculated. The settlement amount will be based on the difference between the payments the Customer has made over the previous 12-months period and the value of the net energy (kWh) supplied by SMUD to the Customer or by the Customer to SMUD. Any net payment owed will be due and payable with the presentation of this settlement bill. Any balance shown as due to SMUD on the monthly bills received by any other class or customer is due and payable upon receipt. The value of electricity supplied by SMUD or the Customer will be the full retail price of electricity under the applicable rate schedule in effect at the time of supply and for the quantities of net energy supplied by SMUD or the Customer. Customer may elect to pay the outstanding balance each month to minimize year-end settlements. At the end of each twelve (12) month period

Sheet No. 1-NM-1

from the origination of the net metering agreement, SMUD may issue payment to SMUD energy customers for any credit balance during the prior year.

QUALIFYING LARGE COMMERCIAL > 20 kW (>30 kW for Agricultural Customers)

Monthly net energy consumed or generated will be billed or credited at the applicable tier or time-of-use rate. Excess generation over the entire year, will not be reimbursed by SMUD except through purchase agreement. Demand and facilities charges will be charged the same as other customers in the applicable rate category. Bills for demand-billed commercial, industrial and agricultural customers are subject to payment in each normal billing cycle with monthly credit carryover on a month-to-month basis until settlement.

Sheet No. 1-NM-1

Appendix C

Solar Surcharge

I. Applicability

To all customers receiving retail electric service from the District.

II. General Conditions

The District has a goal to have 126 MW of solar that meet Senate Bill 1 (SB 1) requirements by the end of 2016. SB 1 is designed to encourage installation of customer-owned solar within the service3 area, with expectation of arriving at a subsidy-free market by the end of 2016.

III. Specific Conditions

A temporary surcharge and balancing account was established as of January 1, 2008 to fund SB 1 requirements.

IV. Budget Impacts

Budget impacts are dependent on surcharge rate which may fluctuate annually. The surcharge collection will be capped at \$130 million. The surcharge rate per kWh may be adjusted annually to reflect changing market conditions and to meet annual goals.

V. Rate Charges

SB 1 charge: \$.0002/kWh as of January 1, 2009.

VI. Application

The Senate Bill 1 charges (SB 1) became effective January 1, 2008. On January 1 of each subsequent year the calculated SB 1 surcharge will be recalculated for the new budget year.

(End)

Sheet No. 1-SB-1

Audited Financial Statements

Unaudited Financial Statistics

