

# 2019 Budget

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# 2019 Budget

## Strategic Direction

## Purpose, Vision & Values

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## Core Values: Strategically Essential for SMUD

- |      |                              |       |  |
|------|------------------------------|-------|--|
| SD-1 | Purpose and Vision Statement | SD-8  | Employee Relations                       |
| SD-2 | Competitive Rates            | SD-9  | Resource Planning                        |
| SD-3 | Access to Credit Markets     | SD-10 | Innovation                               |
| SD-4 | Reliability                  | SD-11 | Public Power Business Model              |
| SD-5 | Customer Relations           | SD-12 | Ethics                                   |
| SD-6 | Safety                       | SD-16 | Information Management & Security Policy |
| SD-7 | Environmental Leadership     | SD-17 | Enterprise Risk Management               |

## Key Values: Provide Value-Added Services

- SD-13 Economic Development
- SD-14 System Enhancement
- SD-15 Outreach & Communication
- SD-19 Diversified Business

## Purpose Statement

SD-1A SMUD is community-owned. Our purpose is to enhance the quality of life for our customers and community through creative energy solutions.

## Vision Statement

SD-1B SMUD's vision is to be the trusted partner with our customers and community, providing innovative solutions to ensure energy affordability and reliability, improve the environment, reduce our region's carbon footprint, and enhance the vitality of our community.

## Core Values: Strategically Essential for SMUD

- SD-2 Maintain Competitive Rates
- SD-3 Maintain Access to Credit Markets
- SD-4 Reliability - Meeting customer energy requirements
- SD-5 Maintain a high level of Customer Relations
- SD-6 Safety - Creating a safe environment for employees and the public is a core value of SMUD
- SD-7 Environmental Leadership - Community engagement, continuous improvement in pollution prevention, carbon reduction, energy efficiency, and conservation
- 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

## Core Values: Strategically Essential for SMUD

- SD-9 Provide customer-owners with a sustainable power supply through the use of an integrated Resource Planning process
- SD-10 Deliver innovative solutions, products and services to our customers
- SD-11 Public Power Business Model – Support and strengthen the public power business model
- SD-12 Ethics – Maintain the public trust and confidence in the integrity and ethical conduct of the Board and SMUD employees
- SD-16 Information Management and Security Policy - Proper management of cyber and physical information are critical to effective risk management and to ensure regulatory compliance, business resiliency and customer satisfaction. SMUD will take prudent and reasonable measures to ensure information security, customer privacy and proper record management.
- SD-17 SMUD will implement and maintain an integrated enterprise risk management process that identifies, assesses, manages and mitigates a variety of risks facing SMUD, including financial, supply, operational, physical security, climate change, legal, legislative and regulatory, and reputational risk.

## Key Values: Provide Value-Added Services

- SD-13 Economic Development – Promote economic vitality of our region and the growth of our customer base
- SD-14 Make selected distribution system enhancements such as relocation or underground placement of primary power lines.
- SD-15 Broad Outreach and Communication to SMUD’s customers and the community
- SD-19 Broaden and diversify the products and services that SMUD offers

# 2019 Budget Performance Metrics

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# Performance Metrics



Strategic Direction	Type	Metric	2018 Target	2018 Forecast	2019 Target
SD-6 Safety	BOD	<b><u>Shift safety culture, improve safety results, and maintain positive financial performance</u></b>			
		<b>Leading Indicator</b>			
		Employee-Supervisor Interactions	95%	95%	95%
		Incident Reports ≤ 3 days [1]	95%	95%	95%
		Incident Investigations ≤ 5 days [2]	95%	95%	95%
		<b>Days Away Restricted Time (DART) [3]</b>			
		Annual average	1.5	1.1	1.4
	<b>Workers' Compensation</b>				
	Average Workers' Compensation Cost per \$100 payroll (Actuarial Basis) (Maintain positive financial performance of the workers' compensation program.)	\$0.98	\$0.65	\$0.94	
	<b>Public Safety [4]</b>				
Corrective actions implemented (to protect the public from injuries related to SMUD ops. or facilities.)	95%	95%	95%		
EXE	<b>Community Safety [5]</b>				
	Investigate all identified responsible party electrical contacts	100%	100%	100%	
	Follow-up with identified responsible party for all dig ins	100%	100%	100%	
		Conduct monthly public outreach and education on safety	12	12	12

[1] Employee-Supervisor Interactions Incident Reports excludes incident types where the date of injury may be difficult to ascertain. It measures the percentage of reports completed within the target date, which is normally set to 3 days, but may be extended due to extenuating circumstances.

[2] Incident Investigations excludes incident types where the investigation may require coordination of outside parties or may have a high degree of complexity. It measures the percentage of investigations completed within the target date, which is normally set to 5 days, but may be extended due to extenuating

[3] 2019 Target decrease reflects Board SD-6 target to reduce SMUD's injury severity rate to 1.4 by 2020.

[4] Public Safety metric reflects number of corrective actions implemented, divided by number of corrective actions identified or reported.

[5] Expanding Community Safety focus with proactive public outreach and examining activities that put community safety at risk – 100% investigation/follow up of all identified responsible parties of electrical contacts and dig ins.

**TYPE: BOD = Identified by Board of Directors in Strategic Direction as overall SMUD metric; EXE = Identified by Executive Management as overall SMUD metric**

# Performance Metrics (continued)



Strategic Direction	Type	Metric	2018 Target	2018 Forecast	2019 Target	
SD-5 Customer Relations	BOD	Customer Satisfaction Survey [6]	95%	95%	95%	
	BOD	Value for What You Pay [7]	73%	72%	73%	
	EXE	<u>New Service Cycle Time</u>				
		Subdivision Bid Print	60 Days	45 Days	60 Days	
		Subdivision Construction	60 Days	45 Days	60 Days	
Commercial Commitment		60 Days	45 Days	60 Days		
Commercial Construction	60 Days	35 Days	60 Days			
SD-13 Economic Development	EXE	Supplier Education and Economic Development (SEED) - Percent of Contract Dollars	20%	>20%	20%	
SD-8 Employee Relations	BOD	<u>Employee Engagement</u>				
Sustain Employee Engagement [8]		>80%	N/A	>80%		

[6] The Customer Satisfaction metric measures customers responding as very satisfied or satisfied with service received in the areas of New Connects, Billing Inquiries, Outbound Outage Communication, Tree Trimming, IVR One Payment and IVR Payment Arrangements. Supports Board target for overall customer

[7] Board target is to reach 80% by the end of 2021, with neither the average commercial customer score fall below 69%, nor the average residential customer score fall below 65% in any year. The 2018 Forecast changed to 72% based on 2018 Q1-Q3 VFP actual performance coupled with historical Q4 VFP

[8] Updated to reflect change to bi-annual versus annual survey starting 2018 to align with standard best practices. 2017 Engagement Survey result was 88%. Next survey will be conducted in 2019. Employee Engagement metrics reflects percentage of employees classified as "fully engaged" and "key contributor" together, to exceed 80% as measured through bi-annual engagement survey.

**TYPE: BOD = Identified by Board of Directors in Strategic Direction as overall SMUD metric; EXE = Identified by Executive Management as overall SMUD metric**

# Performance Metrics (continued)



Strategic Direction	Type	Metric	2018 Target	2018 Forecast	2019 Target	
SD-2 Competitive Rates	EXE	<b>Distribution Maintenance Productivity</b> <i>(Asset Mgmt O&amp;M)</i> [10]	≥ 1	1	≥ 1	
	EXE	<b>O&amp;M Cost to Supply Base-Load Energy, \$/MWh</b> [11]	\$12.90	\$12.38	\$13.61	
	EXE	<b>SMUD O&amp;M Cost per Customer</b> [12]	\$855	\$858	\$896	
SD-4 Reliability	BOD	<b>SMUD Availability of Generation Assets</b> [13]	97.0%	97.2%	97.0%	
	BOD	<b>Overall Availability of Transmission Assets</b> [14]	>99.99%	100%	>99.99%	
	BOD	<b><u>Distribution System Reliability</u></b> [15]				
		<b>Duration of Outages (SAIDI)</b> [16]				
		SAIDI With Major Event		67.5 - 93.3 min	No Major Events	67.5 - 93.3 min
		SAIDI Excludes Major Event		49.7 - 68.7 min	50.4 min	49.7 - 68.7 min
<b>Frequency of Outages (SAIFI)</b> [16]						
SAIFI With Major Event		0.99 - 1.33	No Major Events	0.99 - 1.33		
SAIFI Excludes Major Event		0.85 - 1.14	1.09	0.85 - 1.14		

- [10] Distribution Maintenance Productivity is calculated by work complete divided by dollars spent. Increased spend on vegetation management: achieved more routine trees versus plan and implemented LiDAR related vegetation management work.
- [11] Labor & expenses necessary to manage supply of energy (i.e. generation, transmission & commodity purchase); (excluding commodities, decommissioning and public good). Metric reflected under both Energy Assets and Energy Operations because cost components come from both areas.
- [12] Includes Business Unit O&M Costs (excluding Public Good, Commodities and Legal Settlements). The number of Customers is an average that reflects the fluctuation of SMUD's customer growth during the year. The 2019 forecast is 638,161 customers.
- [13] Maintain high level of availability of generation assets (adjusted IEEE availability for peak load season Jun - Sep). Supports Board target for overall availability of transmission assets.
- [14] Supports Board target for overall availability of transmission assets.
- [15] Reliability metric is calculated with and without major storms based on Strategic Direction.
- [16] 2018 forecast is based on 2018 actuals through September 30 and 2013-2017 performance for October through December. No major events were recorded in 2018 actuals through September 30. In 2018, the projection for both SAIFI and SAIDI is to be within the Strategic Direction. This is due to the Reliability Action Plan implemented in late 2016 and executed throughout 2017.

**TYPE: BOD = Identified by Board of Directors in Strategic Direction as overall SMUD metric; EXE = Identified by Executive Management as overall SMUD metric**

# Performance Metrics (continued)



Strategic Direction	Type	Metric	2018 Target	2018 Forecast	2019 Target
SD-2 Competitive Rates	BOD	<b>Competitive System Average Rates</b>			
		<b>Percent below Pacific Gas &amp; Electric</b> [17] <b>Percent below each Customer Class</b>	18.0%  Meet 10% Goal in 11 of 11 rate classes	33.4%  25.9-48.6% per rate class	18.0%  Meet 10% Goal in 11 of 11 rate classes
SD-3 Access to Credit Markets	EXE	<b>Commodity \$/MWh of Total Retail Load</b> [18]	\$41.55	\$40.53	\$43.30
	BOD	<b>Fixed Charge Ratio of at least 1.45</b> [19]	1.98	2.17	1.76
	EXE	<b>Non-commodity O&amp;M Actual vs. Budget</b> [20]	100%	99%	100%
	EXE	<b>Three-year Operational Planning Targets</b> [21]	Meet Target	Meet Target	Meet Target
	EXE	<b>Net Debt per Customer</b> [22]	\$2,850	\$2,760	\$3,000

[17] Board SD-2 minimum target is 18% on a system average basis and 10% for each customer class. 2018 forecast is based on rate forecasts as of

[18] Supports Board SD-3 metric for fixed charge ratio metric. 2018 Target was based on retail load of 10,472 GWh. The 2019 Target is based on forecasted retail load of 10,348 GWh.

[19] Supports Board SD-3 fixed charge ratio of at least 1.50, updated in 2018. Develop annual budgets using a target cash coverage of all debt service payments

[20] Non-commodity O&M = Business Unit O&M excluding Public Good, Commodities and Legal Settlements.

[21] Supports SD-3 Board metric for fixed charge ratio metric.

[22] Net Debt per Customer is one of the key financial metrics that rating agencies factor into their credit assessments.

**TYPE: BOD = Identified by Board of Directors in Strategic Direction as overall SMUD metric; EXE = Identified by Executive Management as overall SMUD metric**

# Performance Metrics (continued)



Strategic Direction	Type	Metric	2018 Target	2018 Forecast	2019 Target
SD-4 Reliability	BOD	<b>Customer Load Demand</b> [23]	100%	100%	100%
SD-9 Resource Planning	BOD	<b>Energy Savings</b> [24] <b>GWh Savings - Energy Efficiency</b>	145	149(*)	161(*)
	BOD	<b>Renewable Energy to meet SMUD's Load Renewable Portfolio Standards (RPS)</b> [25]	29.0%	29.0%	31.0%
SD-7 Enviromental Protection	EXE	<b>Carbon Reduction</b> (Tonnes of CO <sub>2</sub> ) [26]	369,623	450,200	438,389

[23] Customer Load Demand met through Use of Generation Resources and Purchased Power Portfolio. Target reflects Board Generation Resources and Purchase Power Portfolio Target.

[24] Total energy savings goals are reflective of Board's 10-year energy efficiency goals. GWh savings for 2018 Forecast and 2019 Target include GWh for Electrification, Energy Efficiency Estimated Pilots, and Low Income of 3 GWh.

[25] SMUD will meet the 2018 target (29%; ~3,010 GWh) using forecasted 2018 generation (18.6%; ~1,940 GWh) and surplus renewable generation from previous years (10.4%; ~1,070 GWh). The 2019 RPS target is 31% (~3,250 GWh). The RPS statutes allow renewables procured above the compliance period targets to be carried over and applied in future compliance periods.

[26] Carbon Reduction Target for 2018 was reset to match updated SolarShares® actual contracts. For 2019, calculating the Carbon Reduction (tonnes of CO<sub>2</sub>) follows the current methodology and includes Energy Efficiency with Electrification and Low Income, SolarShares® GWh Production, Estimated Customer Installed Solar GWh Production and Greenery®. Calculated as (GWh\*1000\*602)/2204. 602 lb/MWh is the new carbon factor for 2019 (632 was the carbon factor for 2018). Carbon Reduction methodology will be changing in 2020 based on updated IRP. The 2018 Forecast increased due to higher estimated

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# 2019 Budget

## Business Units & Segments and Organizational Chart

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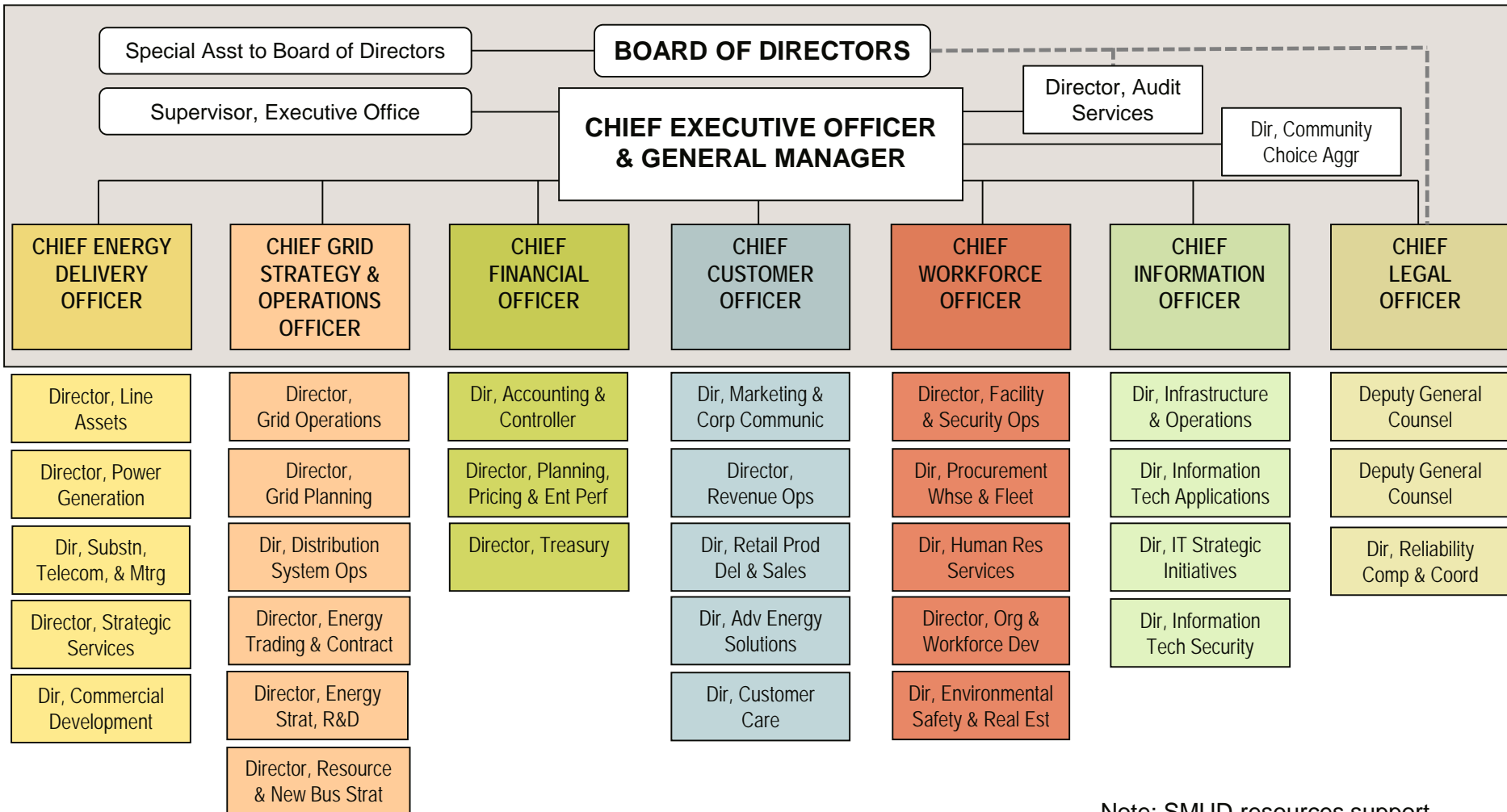
# Business Units & Segments



The SMUD Budget is planned by Business Unit processes which in some cases differs from the organizational/functional reporting structure.

Customer/ Community	Energy Operations	Energy Delivery	Internal	Technology	Corporate
Retail Product Delivery & Sales	Grid Planning & Operations	Power Generation	Operations	Applications	Governance
Advanced Energy Solutions	Commodity, Procurement & Sales	Grid Assets	Planning	Infrastructure & Operations	Strategic & Finance
Revenue Operations	Energy Strategy, Research & Development		Services	Strategy Planning & Governance	Legal, Gov't Affairs & Reliability Compliance
Communic. Marketing & Community Relations	Resource & New Business Strategy		Support	Strategic Initiatives	Enterprise Affairs
Customer Care				Information Security	

# Organization Chart by Executive



Note: SMUD resources support Business Unit processes regardless of organization/functional affiliation.



# 2019 Budget

## Economic Outlook & Assumptions

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The planning data presented here is based on a recent update as part of the Corporate Resource Planning process.

Customer count is down slightly in the 2018 forecast from what was assumed in the 2018 budget. Looking ahead, we are seeing higher growth in the future in residential customers and flat commercial customer growth, compared to our recent past.

New customers to be added to SMUD's customer base in 2019 are projected to total approximately 5,187. This is less than a 1 percent annual growth rate, which is below the average growth during the past decade. Of the 2019 projection, 5,196 are new residential customers and we expect a decrease of 9 other customers.

	<b>2018</b> <b><u>BUDGET</u></b>	<b>2018</b> <b><u>FORECAST</u></b>	<b>2019</b> <b><u>BUDGET</u></b>
New residential customers	4,740	(218)	5,196
All other new customers	418	(154)	(9)
TOTAL new customers*	5,158		5,187
Residential customers	557,839	557,621	563,035
All other customers	75,135	74,981	75,126
TOTAL customers**	632,974	632,602	638,161

\*Reflects monthly average instead of end-of-year count in order to reflect the fluctuation of SMUD's customer growth.

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Energy sales to customers is projected to decrease from the 2018 budget assumption.

Unmanaged Peak load is forecasted to decrease by 34 MW from the 2018 budget assumption.

	2018	2019
	<u>BUDGET</u>	<u>BUDGET</u>
Billed energy sales (GWh)	10,472	10,348
Peak load (MW)	2,889	2,855

## Inflation Escalation Factors:

The forecasted inflation factor for use where applicable in preparing the 2019 budget is 2%. The longer-term outlook (ten years) used in the business strategy update is the same, at 2% per year.

The cost-of-living (COLA) increase for SMUD salaries and wages during 2019 is based on formulas contained in negotiated bargaining agreements.

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## Power Supply Assumptions

The Integrated Resource Plan is the basis for the operating assumptions for the 2019 Budget. Electricity prices are forecast to be higher, and natural gas prices are forecast to be lower, in the 2019 Proposed Plan than what was forecast in the 2018 Budget. The Upper American River Project (UARP) generation and renewable generation is forecasted to be higher in 2019, while thermal generation is forecasted to be lower in the 2019 Budget.

SMUD became a Control Area, presently called a Balancing Authority (BA), in June 2002 and since then has operated its transmission and generation system independently. On January 1, 2006, the Western Area Power Administration's Sierra Nevada Region (WAPA-SNR) was integrated into the SMUD BA, followed on December 1, 2006, by the California-Oregon Transmission Project (COTP) – a 500kV transmission line - and the Modesto Irrigation District (MID). On May 8, 2009, together with MID and the cities of Redding and Roseville, SMUD entered into a Joint Powers Agreement to create the new Balancing Authority of Northern California (BANC). With regulatory approval on May 1, 2011, the operations of SMUD BA were transferred to BANC BA. BANC uses SMUD's existing employees and physical resources to be the BANC Operator. BANC's General Manager reports to a five person Commission made up of SMUD, MID, City of Redding, City of Roseville, and Trinity Public Utility Districts chief executives. This BA, as an independent entity, is not subject to market disruptions that result from financially induced supply shortages within the California Independent System Operator (CAISO) or investor-owned utilities. SMUD is still subject to certain CAISO transmission, grid management and other costs for transactions that use the CAISO controlled grid. These costs have been included in SMUD's 2019 Budget.

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## SMUD Generation

**SMUD Hydroelectric (Upper American River Project):** The 2019 Plan assumes median rainfall and normal starting reservoir levels in 2019. Generation is expected to be 1,583 GWh.

**Other SMUD Generation (South Fork, Photovoltaic, Solano Wind):** The 2019 Plan assumes average generation subject to limitations governing the operation of each plant. The largest contributor, Solano Wind Phases 1, 2 & 3 is expected to generate 618 GWh.

**SFA Cosumnes Power Plant:** This 500 MW gas-fired combined cycle power plant began commercial operation in February 2006. Forecasted generation from this plant in 2019 is 3,452 GWh.

**CVFA Carson Cogeneration:** This gas-fired cogeneration project, which began commercial operation in October 1995, consists of a 61 MW combined cycle unit and a 42 MW peaking unit. With the installation of an auxiliary steam boiler in 2017, if running the cogeneration unit is uneconomic, it can be turned off. Energy will be supplied from the auxiliary boiler instead of the cogeneration unit. The forecasted generation from this facility in 2019 is 344 GWh.

**SCA Procter & Gamble Cogeneration:** This gas-fired cogeneration plant began commercial operation in March 1997. It consists of a 120 MW combined cycle power plant and a 49 MW peaking unit that became operational in May 2001. With the installation of an auxiliary steam boiler in 2016, if running the cogeneration unit is uneconomic, it can be turned off. Steam will be supplied from the auxiliary boiler instead of the cogeneration unit. Forecasted generation from this facility in 2019 is 761 GWh.

**SPA Campbell Soup Cogeneration:** This gas-fired combined cycle plant, began commercial operation in December 1997. It consists of a 160 MW combined cycle power unit. Beginning in 2008 the 72 MW McClellan gas turbine is also included under SPA. Forecasted generation from these two units in 2019 is 916 GWh.

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## Purchased Power

The 2019 Plan assumes delivery of energy and capacity from the following contracts:

**Western Area Power Administration (WAPA) / Central Valley Project (CVP)**: Provide 376 MW of capacity and 661 GWh of energy. Under a separate agreement, WAPA provides 38 GWh to serve its customers located within SMUD's service territory.

**Kiefer Landfill**: Provide a total of 14.0 MW of capacity and 109 GWh of energy under two separate agreements. The original Kiefer I contract was extended in November 2014, for an additional 10 years. The current Kiefer II contract was extended in March 2016, for an additional 10 years.

**MM Yolo**: Provide 2.4 MW of capacity and 21 GWh of green energy under an agreement that expires in June 2026.

**IBR Highwinds**: Provide 50 MW of capacity and 127 GWh of energy under an agreement signed in July 2015 to extend the original contract for additional 10 years.

**IBR Biomass (previously RockTenn)**: Provide 45 MW of capacity and 340 GWh of energy under an agreement that expires in August 2021.

**Grady Wind**: Provide 200 MW of capacity and 605 GWh of energy of energy under an agreement that expires in December 2043.

**enXco – SolarShares®**: Provide 0.5 MW of capacity and 2 GWh of energy to participants of Solar Shares program under an agreement which expires in August 2028.

**Santa Cruz Landfill**: Provide 1.5 MW of capacity and 12 GWh of energy under an agreement, which expires in September 2024.

**Feed-in-Tariff Solar Projects**: Provide 100 MW capacity and 214 GWh of energy delivered from all projects under a 20-year term ending in December 2030.

**Van Warmerdam Dairy Biogas**: Provide 0.5 MW of capacity and 2 GWh of energy under an agreement which expires in May 2033.

(continued)

## Purchased Power (cont'd)

**New Hope Dairy Biogas:** Provide 0.4 MW of capacity and 2 GWh of energy under an agreement which expires in August 2033.

**Patua (aka: Gradient) Geothermal:** Provide 25 MW to 19 MW of capacity and 147 GWh of energy under an agreement, which expires in December 2033.

**Loyalton Biomass:** Provide 4.2 MW of capacity and 33 GWh of energy under an agreement, which expires in March 2023.

**Van Steyn Dairy Biogas:** Provide 0.12 MW of capacity and 1 GWh of energy under an agreement, which expires in June 2035.

**Camp Far West:** Provide 6.8 MW of capacity and 21 GWh of energy under an agreement which expires in July 2031.

**Conergy SolarShares®:** Provide 1.3 MW of capacity and 2 GWh of energy to participants of Solar Shares program, under an agreement that expires in August 2034.

**Rancho Seco Solar:** Provide 10.88 MW of capacity and 23 GWh of energy under a 30-year agreement which expires in August 2036.

**Sutter Energy Center:** Provide 258 MW of capacity and 106 GWh of energy under a two-year contract with Calpine Energy Services, L.P. effective April 2018 from a natural gas-fired, combined-cycle.

**CalEnergy:** Provide 20 MW of capacity and 137 GWh of geothermal energy under an agreement expiring December 2039.

**SB-859 Biomass:** Provide 2.6 MW of capacity and 19 GWh of energy, per State legislation requiring utilities in California to procure power from biomass plants that burn forest fuels from high hazard areas as identified by Cal Fire. A biomass project of 2.7 MW of capacity is expected in January 2019.

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## Purchased Power (cont'd)

The balance of energy requirements to meet forecasted sales to customers will be met by short-term purchases of energy. Some of the long-term and short-term contracts will be delivered over SMUD's 528 MW share of the California-Oregon Transmission Project (Northwest) or under the South-of-Tesla transmission agreement with PG&E (Southwest & Southern California). These purchases are coordinated through SMUD's membership in the Western Systems Power Pool (WSPP), which facilitates sales and exchanges among its 30 member utilities, and through market trading. Lastly, another 5-year extension to the WAPA Custom Product ~300-MW sale/purchase contract with WAPA allows SMUD to import additional power from California Oregon Border through 2020.



# 2019 Budget

## Budget Summary

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## Overview

The 2019 Budget totals \$1.71 billion. This represents a decrease of \$25 million from the 2018 Budget. The 2019 Budget is a request to authorize new spending.

The 2019 SMUD Budget summarized on the following pages is a blueprint of planned operating, public goods and debt service expenses and capital expenditures for the fiscal year beginning January 1, 2019. Historical comparisons to the 2018 Budget adopted by the Board on December 21, 2017 are shown to put the 2019 Budget in perspective. A forecast of actual 2018 expenses is also shown.

The O&M and Capital Budgets are shown by Business Unit. SMUD Business Units correspond to business processes which deliver specific products and services to SMUD customers. The core business processes are represented by the Customer & Community Services, Energy Operations and Energy Delivery Business Units. Included within Energy Operations and Customer/Community are Public Good costs related to energy efficiency, low income assistance, renewable generation and research and development. These costs are shown separately because they are designated as Public Goods programs as determined by statute.

The Technology, Internal Services and Corporate Services Business Units provide services which enable the other business units to perform their work. The planning and budgeting philosophy is to more accurately plan and measure the total cost of SMUD business processes and set performance improvement targets for the processes and Business Units that will most efficiently accomplish strategic goals. This budgeting methodology also most efficiently allocates and plans resources from throughout SMUD to the Business Units and work processes.

Within each Business Unit budget, work processes are subdivided into business segments and individual business processes. Budget detail is provided at both levels. Business segments and processes enable each business unit to effectively plan and measure performance of its operations at a manageable level.

The budgeted costs shown under each core Business Unit include all the costs of performing the work planned for 2019. These include labor costs from departments throughout SMUD which perform work in the core business processes. Labor costs include employee benefits. Also included in the budget is a surcharge allocation of internal service costs such as transportation, facilities, technology, human resources, and security. Expenditures budgeted by Technology and Internal Services represent those process costs that are not allocated to the core business units, such as dedicated software implementations or enhancements that do not meet minimum SMUD criteria for capitalization. The Corporate Services budget includes insurance and risk management, cash and debt management, and corporate legal, reliability compliance, legislative, regulatory and government relations, planning and performance, executive management and Board of Directors; a portion of this budget is allocated to Capital and Public Good.

The 2019 Budget includes the following major components:

**OPERATING EXPENSES:** Expenses related to producing and acquiring energy, operating and maintaining the electrical delivery system, providing service to customers including public goods (energy efficiency, low income assistance, new renewable generation sources, and research and development of advanced technologies) programs, and corporate activities. Included within this category as a separate line item are commodity costs associated with energy supply. These costs include purchased power, fuel for energy production, and transmission wheeling costs.

Also included under Energy Operations are fuel, operating and interest expense associated with CVFA's Carson Cogeneration plant, SCA's Procter & Gamble plant, SPA's Campbell Soup Cogeneration plant, SFA's Cosumnes Power Plant, and NCGA No. 1 pass-through gas costs. These expenses are shown in the SMUD Budget because SMUD will reimburse CVFA, SCA, SPA, SFA and NCGA No. 1 for their costs under the terms of the Power and Gas Purchase Agreements. The detail CVFA, SCA, SPA, SFA and NCGA No. 1 Budgets are also in separate booklets as they will be approved by the CVFA, SCA, SPA, SFA and NCGA No. 1 Commissions.

**CAPITAL INVESTMENT:** Investment in additions and improvements to SMUD's property, plant and equipment. The Capital Investment budget includes all qualifying costs related to acquiring or constructing tangible and intangible assets which meet SMUD's capitalization guidelines - cost exceeding \$5,000 and an estimated service life greater than two years. SMUD follows Federal Energy Regulatory Commission (FERC) capitalization guidelines which dictate the inclusion of all direct costs (labor, employee benefits, materials, services and other) and a proportionate share of indirect costs (engineering and construction supervision and support, transportation, insurance, etc.) related to capital projects. Capital assets are depreciated on a straight-line basis over their estimated useful service life.

**ALLOCATED:** Costs in the two supporting business units, Technology and Internal Services, which enable the core business units to perform work. These costs are allocated to both O&M and capital costs, based on the quantity of labor hours. The aggregated allocated costs for Technology and Internal Services are presented in the budget documentation separately as information only; the actual costs are reflected in each of the Business Unit's budgets as the total cost of their work processes.

**DEBT SERVICE:** Interest expense on and principal repayments of SMUD's outstanding long-term debt and commercial paper notes, any revenues or payments on interest rate swaps, and trustee fees and debt issuance costs. Detail is provided in the Budget Summary.

## Description of Cost Categories

<b>Activity Type Labor</b>	SMUD employee labor planned to a business unit work process. Each Activity Type has a standard hourly charge-out rate that is based on work (non-leave) hours, average annual employee salaries, and includes benefits.
<b>Materials &amp; Equipment</b>	Materials and equipment either issued from inventory or purchased for a specific project or task.
<b>Dues &amp; Publications</b>	Dues and publications and general membership requirements to accomplish work.
<b>General Expenditures</b>	All services and other non-material costs not covered by other specific cost categories including training, travel, rents, leases, licenses, fees, taxes, etc.
<b>Outside Services</b>	The cost of outside services contracts, consultants, and outside legal service.
<b>Advertising</b>	The cost of advertising.
<b>Utilities &amp; Postage</b>	The cost of telephones, other utilities and postage.
<b>Insurance</b>	The cost of property and liability insurance.
<b>Rebates &amp; Incentives</b>	The cost of energy efficiency rebates and incentives.
<b>Commodities</b>	The cost of purchased power, wheeling, and fuel for SMUD and JPA generating plants.
<b>Surplus/Whsl Pwr Sales</b>	The revenue generated from selling energy which is not needed to meet SMUD retail load.
<b>LI/LS Rate Discount</b>	The discount given to customers who qualify for the Low Income or Medical Energy Discount (MED) rate subsidy.
<b>Cost Reductions/Reimb</b>	Reimbursements, cost-sharing grants, or pass-through amounts received from outside parties to reduce net costs.
<b>Cost Center Overhead</b>	A rate developed to recover the indirect costs of a Cost Center. Includes Activity Type labor for administration, supervision, training, and miscellaneous general expenses such as office supplies and travel. It is assessed per hour of Activity Type Labor planned directly to the work.
<b>Surcharges</b>	Surcharge rates developed to recover 1) an allocation of internal service costs such as transportation and technology assessed per hour of Activity Type Labor planned directly to the work, 2) the costs of procuring outside service agreements (excluding outside legal service) and cost of procuring, storing, and handling materials and equipment assessed relative to the contract amount or whether material issued from inventory or purchased specifically for a project or task, 3) miscellaneous general and administrative SMUD expenses including insurance and risk management, cash management, debt management, and other assessed to capital and public good projects based on a flat percentage of overall SMUD activity type labor.

# O&M Budget Summary



Description (\$000s)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frcst	% Change vs Frcst
<i>Customer/Community (excl. PubGd)</i>	113,733	110,728	122,010	11,282	10%
<i>Public Good</i>	40,324	44,316	45,661	1,345	3%
<b>Customer/Community</b>	<b>154,057</b>	<b>155,044</b>	<b>167,671</b>	<b>12,627</b>	<b>8%</b>
<i>Energy Delivery (excl. JPA)</i>	200,359	192,564	196,749	4,185	2%
<i>JPA Interest Expense</i>	8,674	8,674	7,576	(1,098)	-13%
<b>Energy Delivery (excl. JPA)</b>	<b>209,033</b>	<b>201,238</b>	<b>204,325</b>	<b>3,087</b>	<b>2%</b>
<i>Commodity (net)</i> [1]	435,134	426,173	448,091	21,918	5%
<i>Energy Operations (excl. PubGd)</i>	79,304	79,429	84,527	5,097	6%
<i>Public Good</i>	14,681	12,156	15,629	3,473	29%
<b>Energy Operations</b>	<b>529,119</b>	<b>517,758</b>	<b>548,246</b>	<b>30,488</b>	<b>6%</b>
<b>Internal Svcs</b>	<b>13,221</b>	<b>28,760</b>	<b>12,893</b>	<b>(15,867)</b>	<b>-55%</b>
<b>Technology</b>	<b>37,464</b>	<b>34,584</b>	<b>39,308</b>	<b>4,723</b>	<b>14%</b>
<b>Corporate Services</b>	<b>63,041</b>	<b>60,215</b>	<b>78,022</b>	<b>17,807</b>	<b>30%</b>
<b>Other Employee Benefits</b> [2]	<b>29,859</b>	<b>25,237</b>	<b>30,634</b>	<b>5,396</b>	<b>21%</b>
<b>O&amp;M Budget Authorization</b>	<b>\$1,035,795</b>	<b>\$1,022,837</b>	<b>\$1,081,099</b>	<b>\$58,262</b>	<b>6%</b>
<b>Revenue</b>	<b>(203)</b>	<b>(108)</b>	<b>(55)</b>	<b>53</b>	<b>49%</b>
<b>O&amp;M Net</b>	<b>\$1,035,592</b>	<b>\$1,022,730</b>	<b>\$1,081,044</b>	<b>\$58,314</b>	<b>6%</b>

[1] Net of surplus sales. The 2019 Budget assumes median water year.

[2] Other Post-Employment Benefits (OPEB) and Workers Compensation - These benefits are not allocated or included as a labor expense in the Business Units.

# O&M Budget Summary (continued)



Cost Category* (\$000's)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frcst	% Change vs Frcst
<b>ActivityType Labor</b>	<b>\$211,833</b>	<b>\$213,611</b>	<b>\$228,683</b>	<b>\$15,072</b>	<b>7%</b>
Material & Equipment	10,929	9,262	11,057	1,796	19%
Dues & Publications	6,288	5,710	6,846	1,136	20%
General Expenditures	24,373	35,459	31,994	(3,465)	-10%
Outside Services	146,742	130,926	128,243	(2,683)	-2%
Advertising	3,866	2,859	3,707	849	30%
Utilities & Postage	7,397	7,559	7,243	(316)	-4%
Insurance	13,166	14,284	18,931	4,647	33%
Rebates & Incentives	23,234	24,662	27,452	2,790	11%
Commodities [1]	499,013	489,179	562,737	73,559	15%
Surplus/Whsl Pwr Sales	(37,817)	(54,021)	(72,620)	(18,598)	34%
<b>Non-Labor Expenditures</b>	<b>697,190</b>	<b>665,877</b>	<b>725,592</b>	<b>59,715</b>	<b>9%</b>
<b>Cost Reduction/Reimb</b>	<b>(40,103)</b>	<b>(25,205)</b>	<b>(54,783)</b>	<b>(29,578)</b>	<b>117%</b>
<b>Cost Center Overhead</b>	<b>46,755</b>	<b>52,104</b>	<b>51,746</b>	<b>(358)</b>	<b>-1%</b>
<b>Surcharges</b>	<b>81,586</b>	<b>82,539</b>	<b>91,651</b>	<b>9,112</b>	<b>11%</b>
<b>Expenditures Subtotal</b>	<b>997,261</b>	<b>988,926</b>	<b>1,042,889</b>	<b>53,963</b>	<b>5%</b>
<b>JPA Interest</b>	<b>8,674</b>	<b>8,674</b>	<b>7,576</b>	<b>(1,098)</b>	<b>-13%</b>
<b>Other Employee Benefits</b>	<b>29,859</b>	<b>25,237</b>	<b>30,634</b>	<b>5,396</b>	<b>21%</b>
<b>O&amp;M Budget Authorization [2]</b>	<b>\$1,035,795</b>	<b>\$1,022,837</b>	<b>\$1,081,099</b>	<b>\$58,262</b>	<b>6%</b>
<b>Revenue</b>	<b>(203)</b>	<b>(108)</b>	<b>(55)</b>	<b>53</b>	<b>49%</b>
<b>O&amp;M Net</b>	<b>\$1,035,592</b>	<b>\$1,022,730</b>	<b>\$1,081,044</b>	<b>\$58,314</b>	<b>6%</b>

[1] Net of surplus sales. The 2019 Budget assumes median water year.

[2] O&M Budget Authorization includes Public Good. A summary of Public Good is provided on the following page. The budget resolution provides up to a ten percent contingency per line item.

\*Cost categories described on page 29

# O&M Budget Summary (continued)



## Public Good

2019 Summary (\$000)	Customer/ Community	Energy Operations	Total
Energy Efficiency	\$33,988	\$759	\$34,747
Residential Assistance	8,946	0	8,946
Renewables	2,728	0	2,728
Research & Development	0	14,870	14,870
<b>Public Good Budget Authorization [1]</b>	<b>\$45,661</b>	<b>\$15,629</b>	<b>\$61,290</b>
Revenue	0	0	0
Rate Subsidy	0	0	32,629
<b>Total Public Good [2]</b>	<b>\$45,661</b>	<b>\$15,629</b>	<b>\$93,919</b>

[1] Public Good expenditures are included in SMUD O&M summary (this table is information only)

[2] Specific information is provided within Customer/Community & Energy Operations Business Units



The O&M Budget for 2019 totals \$1,081 million, which is \$45.3 million or 4 percent higher than the 2018 Budget.

**Commodities:** The Energy Operations Commodity budget for 2019 of \$448.1 million is \$13.0 million higher than the 2018 Plan. Details on the commodity assumptions in the 2019 Budget are found on pages 20-24.

## **Business Unit:**

- **Energy Operations:** Excluding commodities and public good, O&M costs in 2019 Budget total \$84.5 million, which is \$5.2 million or 7 percent higher than the 2018 Budget. The 2019 budget is higher due to the new Bring Your Own Thermostat project, new modeling software costs for Energy Trading and the implementation of the Energy Imbalance Market.
- **Energy Delivery:** Excluding JPA interest, the 2019 Budget for O&M totals \$196.7 million, which is \$3.6 million or 2 percent lower than the 2018 Budget. The 2019 budget includes costs for overhaul expenses, Solano Wind Phase 1 & 2, and work related to wildfire mitigation which includes UARP easement widening and routine tree trimming.
- **Customer/Community:** Excluding public good, the 2019 O&M Budget is \$122.0 million; this is \$8.3 million higher than the 2018 Budget. The increases are primarily driven by changing business needs, Time of Day outreach and communication, and increasing customer programs such as SolarShares®, building electrification, and electric vehicle programs.
- **Corporate Services:** O&M costs in the 2019 budget total \$78 million, which is \$15 million or 24 percent higher than the 2018 budget. This increase is primarily driven by increased insurance needs and contingency amounts for the enterprise.

- **Technology:** 2019 O&M budget is \$39.3 million, this is \$1.8 million higher than the 2018 budget. The increase is related to the costs of planning for capital projects as well as planning and implementing O&M projects proposed for 2019 such as Telecommunications GIS Fiber Audit, Wireless Broadband Feasibility and Telecommunications DC Battery Monitoring.
- **Internal Services:** O&M total is \$12.9 million; this is a decrease of \$0.3 million. This decrease is primarily due to shifting the GIS project from Internal Services to technology beginning in 2019.

Specific information is provided within each Business Unit's documentation

**Public Good:** Total Public Good is \$93.9 million, an increase of \$2.1 million, after inclusion of grant revenues and rate subsidy. The Public Good Budget is \$61.3 million. The difference is because the Budget represents the cash disbursement portion of the program that requires Board authorization.

The subsidy for low income customers is decreasing by \$8.6 million, or 22%. By December 2019, the number of subsidized customers is expected to be approximately 73,989. The total cost of the EAPR subsidy is budgeted at \$30.7 million in 2019. The subsidy for customers who use medical equipment has increased by \$0.2 million to \$1.9 million. Total subsidies are \$32.6 million.

Energy efficiency spending has been adjusted upwards by \$5.5 million to reflect an increase due to new building electrification work and the incorporation of savings from building and equipment codes and standards. Incorporation of savings from codes and standards was included as a component of the portfolio to match standard industry practice going forward. The energy efficiency budget remains in line with the goal of achieving savings of 1.5% of average annual retail energy sales.

Specific information is provided within Customer & Energy Operations Business Unit documentation

**Other Employee Benefits:** SMUD's Other Employee Benefits, is \$30.6 million, an increase of \$0.7 million. This item consists of the O&M portion (unfunded liability) of Other Post-Employment Benefits (OPEB) expense of \$27.0 million and \$3.6 million of workers compensation.

The total OPEB cost of \$36.9 million is the sum of the O&M portion of \$27.0 million and the current year contribution of \$9.9 million. OPEB are costs related to other post employment benefits other than pension (primarily health and dental insurance), for SMUD current and future retirees.

**Revenue:** In our proforma income statement, SMUD has included revenue from electric sales in addition to forecasted revenue from Greenergy®, field service charges, and customer connection charges. Revenue from electric sales has increased compared to the 2018 Budget due to the impact of the 2019 rate increase.

# Capital Budget Summary



Description (\$000s)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frctst	% Change vs Frctst
Customer/Community	\$ 3,318	\$ 3,051	\$ 4,518	\$ 1,467	48%
Energy Delivery	207,481	186,249	213,329	27,080	15%
Energy Delivery Resource Projects [1]	76,909	46,445	68,559	22,114	48%
Energy Operations	6,496	5,764	5,308	(456)	-8%
Energy Operations Resource Projects [1]	6,675	5,027	6,072	1,045	21%
Internal Services [2]	88,195	84,785	54,143	(30,642)	-36%
Technology	72,422	45,498	42,227	(3,271)	-7%
Corporate Contingency & Reserve	42,900	6,000	49,700	43,700	728%
<b>CAPITAL SUBTOTAL</b>	<b>\$ 504,396</b>	<b>\$ 382,819</b>	<b>\$ 443,856</b>	<b>\$ 61,038</b>	<b>16%</b>
Reserve [3]	15,000	0	0	0	0%
<b>Capital Budget Authorization</b>	<b>\$ 519,396</b>	<b>\$ 382,819</b>	<b>\$ 443,856</b>	<b>\$ 61,038</b>	<b>16%</b>
Revenue [4]	(487)	(1,465)	(705)	760	52%
<b>Capital Net</b>	<b>\$ 518,909</b>	<b>\$ 381,353</b>	<b>\$ 443,151</b>	<b>\$ 61,798</b>	<b>16%</b>

[1] Includes projects that support the Integrated Resource Plan

[2] Internal Services capital projects include \$31M for Headquarters Rehabilitation and \$4M for Power Control Center in 2019

[3] Capital Reserve is included in Corporate Contingency & Reserve starting in 2019

[4] DOE Grant Reimbursement

# Capital Budget Summary (continued)



Project Summary (\$000s)	2019 [1]	2020-21 [2]
<i>Meters</i>	4,518	9,444
<b>Customer/Community</b>	<b>\$ 4,518</b>	<b>\$ 9,444</b>
<i>New Substation</i>	63,423	63,346
<i>Line Projects</i>	37,561	47,528
<i>Substation Lifecycle and Improvements</i>	11,535	21,868
<i>Cable Replacement</i>	21,918	57,493
<i>New Services/Local Agency</i>	15,240	27,408
<i>Pole Replacement</i>	16,456	33,329
<i>Transmission</i>	33,880	18,955
<i>Hydro Production</i>	14,404	25,914
<i>Renewable Production</i>	2,848	1,348
<i>Gas Pipeline</i>	655	925
<i>Thermal Production</i>	2,185	450
<i>Other Energy Assets</i>	424	813
<b>Energy Assets</b>	<b>\$ 220,528</b>	<b>\$ 299,376</b>
<i>Thermal</i>	14,500	-
<i>Hydro License</i>	9,854	32,371
<i>Hydro Other</i>	27,543	8,957
<i>Decommissioning</i>	5,562	11,860
<i>Other Energy Assets Resource</i>	3,901	39,636
<b>Energy Assets Resource</b>	<b>\$ 61,360</b>	<b>\$ 92,825</b>
<i>Energy Operations Technology</i>	1,164	600
<i>Interconnection</i>	1,706	3,529
<i>Substation Land &amp; Easement</i>	2,438	1,326
<b>Energy Operations</b>	<b>\$ 5,308</b>	<b>\$ 5,455</b>

# Capital Budget Summary (continued)



Project Summary (\$000s)	2019 [1]	2020-21 [2]
Gas	3,250	6,500
Transmission	2,822	1,460
<b>Energy Operations Resource</b>	<b>\$ 6,072</b>	<b>\$ 7,960</b>
Headquarters Rehabilitation	31,056	-
Power Control Center	4,260	39,422
Facilities	8,036	18,240
Vehicle Replacement	8,322	-
Environmental	2,469	9,791
<b>Internal Services</b>	<b>\$ 54,143</b>	<b>\$ 67,453</b>
Telecom	10,486	11,531
DMS	9,474	3,806
Shared Services Technology	6,348	-
Grid Technology	10,650	7,942
IT Lifecycle and Infrastructure	5,110	4,383
Time of Day	160	-
<b>Technology</b>	<b>\$ 42,227</b>	<b>\$ 27,663</b>
Corporate Contingency [3]	49,700	105,400
<b>Capital Subtotal</b>	<b>\$ 394,156</b>	<b>\$ 615,576</b>
<b>Capital Budget Authorization [1] [2]</b>	<b>\$ 443,856</b>	<b>\$ 615,576</b>

[1] Requested Board Authorization amount for 2019 spending.

[2] Provided for Board information as an estimate of the amount needed to complete projects started in 2019 or earlier. 2020-21 costs do not include amounts for ongoing annual programmatic spending or for projects starting after 2019.

[3] 2019 Corporate Contingency

# Capital Budget Summary (continued)



Cost Category* (\$000's)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frctst	% Change vs Frctst
<b>ActivityType Labor</b>	\$63,905	\$58,714	\$65,192	\$6,478	11%
<i>Material &amp; Equipment</i>	77,898	68,761	66,026	(2,735)	-4%
<i>Dues &amp; Publications</i>	208	202	211	8	4%
<i>General Expenses</i>	75,246	17,407	68,978	51,571	296%
<i>Outside Services</i>	270,214	209,669	213,442	3,773	2%
<i>Utilities &amp; Postage</i>	0	14	8	(6)	-42%
<i>Insurance</i>	592	637	645	8	1%
<b>Non-Labor Expenses</b>	\$424,157	\$296,690	\$349,309	\$52,619	18%
<b>Cost Reduction/Reimb</b>	(\$39,426)	(\$26,104)	(\$27,153)	(\$1,049)	4%
<b>Expenditures</b>	\$448,636	\$329,300	\$387,348	\$58,048	18%
<b>Cost Center Overhead</b>	18,008	17,909	19,120	1,211	7%
<b>Surcharges</b>	37,752	35,609	37,388	1,779	5%
<b>Capital Total</b>	\$504,396	\$382,819	\$443,856	\$61,038	16%
<b>Reserve</b> [1]	15,000		0	0	0%
<b>Capital Budget Authorization</b>	\$519,396	\$382,819	\$443,856	\$61,038	16%
<b>Revenue</b> [2]	(487)	(1,465)	(705)	760	52%
<b>Capital Net</b>	\$518,909	\$381,353	\$443,151	\$61,798	16%

\*Cost categories described on page 29

[1] Capital Reserve is planned in Corporate Services starting in 2019

[2] DOE Grant Reimbursement



SMUD has historically had two categories of capital for budget authorization, Annual and Reserve Capital. Annual Capital are projects with completion dates or specific milestone dates within the current budget year and as such budget dollars are requested during the annual budget cycle. Projects that were approved in prior years but have not been completed are resubmitted to the Board annually for approval to continue the project. Reserve Capital projects will be completed if load growth or customer growth is greater than expected, or if there are unexpected expenditures, or if there are projects in which the planning phase will be completed and work will begin in 2019. Beginning in 2019, Reserve Capital is planned within the Corporate Business Unit.

A summary of Business Unit Capital is provided on the following pages and specific information is provided within each Business Unit's Documentation.

**Capital:** The proposed 2019 capital investment budget is \$443.9 million, for planned investment in generation, transmission, distribution, buildings, vehicles, technology and other assets critical to meeting the energy needs of our customers. Proposed ongoing capital expenditures go through a rigorous evaluation and prioritization process, based on value and risk, to ensure we fund those that have the highest contribution to the Board's strategic directives. Resource projects are evaluated and funded through the Integrated Resource Planning process. This total includes the Reserve Capital Budget of \$15.0 million for unexpected end-of-year project carryover and capital contingency.

**Customer/Community Capital:** Customer Business Unit capital expenditures include \$4.5 million for metering equipment.

**Energy Delivery Capital:** These projects represent capital improvements and investment in the energy delivery infrastructure such as overhead and underground lines and substations that deliver electricity to our customers. Proposed capital investment for 2019 is \$213.3 million. Of this total, \$38 million is for pole and cable replacement, \$103.2 million is for improvements to existing substations, rebuilds of Station G and Station E, construction of the new Franklin substation as well as the new Street Car project. \$15 million is for new services and local agency work.

**Energy Delivery Resource Projects:** Resource project capital spending for the 2019 budget totals \$68.6 million, of which \$35.6 million is for hydro. In addition, \$5.6 million is for nuclear decommissioning.

**Energy Operations Capital:** These projects focus on customer interconnection, telemetry and substation land. The proposed capital investment for 2019 is \$5.3 million.

**Energy Operations Resource Projects:** Resource project capital spending for the 2019 Budget totals \$6.1 million, which includes \$2.8 million for CoSu transmission line and \$3.3 million for new power and gas projects and gas reserves.

**Internal Services Capital:** Internal Services Business Unit capital investments in the 2019 Budget total \$54.1 million. Of this, \$31 million is for the Headquarters Rehabilitation, \$4 million is for the Power Control Center, \$6.3 million is for facilities improvements, \$8.3 million for vehicle replacements, and \$1.8 million for pollution remediation.

**Technology Capital:** Technology Business Unit capital projects are for additions or improvements to SMUD's computer network, including hardware and operating software, the SAP enterprise software system, distribution automation systems, document management, desktop and laptop PCs, and telecommunications and telephone system infrastructure. The Technology capital budget for 2019 totals \$42.2 million. The business unit is planning \$2.9 million for lifecycle and infrastructure programs to replace storage, network, and applications out of support. The 2019 Budget includes work on multi-year initiatives such as \$8.4 million for Workforce Mobility Optimization, \$9.5 million for Advanced Distribution Management System, \$5.8 million for network communications transformation, and \$3.9 million for improvements to Human Resources and Supply Chain back-office systems. New work in 2019 includes \$1.7 million for replacement of microwave radios for communication between SMUD headquarters and Fresh Pond and \$1.1 million for new microwave radio links to Solano Windfarm.

**Corporate Capital Contingency & Reserve:** Corporate Business Unit capital investments in the 2019 Budget total \$49.7 million. The business unit is holding contingency money for the following potential items: additional Technology projects, Downtown Street Car, system enhancement projects, Rule 16 additional development, CPP spare parts, and records management work associated with Workplace 3.0. Beginning in 2019, Reserve Capital of \$15 million is included in Corporate Capital.

Specific information is provided within each Business Unit's Documentation

# Allocated Budget Summary



Description (\$000s)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frctst	% Change vs Frctst
<i>Supply Chain</i>	\$ 14,229	\$ 14,889	\$ 14,967	\$ 77	1%
<i>Fleet &amp; Fuel</i>	8,569	8,633	9,398	765	9%
<i>Other Internal Services</i> <sup>[1]</sup>	42,770	41,989	46,023	4,035	10%
<b>Internal Services</b>	<b>65,568</b>	<b>65,511</b>	<b>70,388</b>	<b>4,877</b>	<b>7%</b>
<b>Technology</b>	<b>51,408</b>	<b>52,078</b>	<b>59,800</b>	<b>7,722</b>	<b>15%</b>
<b>Total Allocated Budget</b> <sup>[2]</sup>	<b>\$116,976</b>	<b>\$117,589</b>	<b>\$130,188</b>	<b>\$12,599</b>	<b>11%</b>

<sup>[1]</sup> Other Internal Services: Health & Safety, Organizational Development, Inclusion, Fire Protection, Security, Postal & Print Shop, Graphics, Human Resources, Labor Relations, Facilities and Fleet (excluding fuel)

<sup>[2]</sup> Allocated Budget expenditures are included in all SMUD Business Unit's O&M and Capital summaries (this table is information only)

# Allocated Budget Summary (continued)



Cost Category* (\$000's)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frctst	% Change vs Frctst
<b>ActivityType Labor</b>	<b>\$55,374</b>	<b>\$55,259</b>	<b>\$58,729</b>	<b>\$3,470</b>	<b>6%</b>
<i>Material &amp; Equipment</i>	7,529	9,945	13,296	3,351	34%
<i>Dues &amp; Publications</i>	61	29	38	10	33%
<i>General Expenses</i>	1,123	1,491	1,305	(186)	-12%
<i>Outside Services</i>	31,839	29,016	33,394	4,378	15%
<i>Advertising</i>	153	151	153	2	2%
<i>Utilities &amp; Postage</i>	1,560	1,477	1,752	275	19%
<i>Insurance</i>	161	142	420	278	195%
<b>Non-Labor Expenses</b>	<b>\$42,426</b>	<b>\$42,251</b>	<b>\$50,358</b>	<b>\$8,107</b>	<b>19%</b>
<b>Cost Reduction/Reimb</b>	<b>(\$81)</b>	<b>(\$413)</b>	<b>(\$86)</b>	<b>\$327</b>	<b>79%</b>
<b>Expenditures</b>	<b>97,720</b>	<b>97,097</b>	<b>109,002</b>	<b>11,905</b>	<b>12%</b>
<b>Cost Center Overhead</b>	<b>14,456</b>	<b>15,668</b>	<b>15,814</b>	<b>145</b>	<b>1%</b>
<b>Surcharges</b>	<b>4,800</b>	<b>4,823</b>	<b>5,372</b>	<b>549</b>	<b>11%</b>
<b>Total Allocated Budget</b> [1]	<b>\$116,976</b>	<b>\$117,589</b>	<b>\$130,188</b>	<b>\$12,599</b>	<b>11%</b>

\*Cost categories described on page 29

[1] Allocated Budget expenditures are included in all SMUD Business Unit's O&M and Capital summaries (this table is information only)

The Allocated Budget for 2019 totals \$130.2 million, which is \$13.2 million higher than the 2018 budget. This is shown as **information only** as 100% of these allocated expenditures are included in the budget dollars of all SMUD O&M and Capital described in this documentation. Internal Services and Technology costs are allocated to business units based on the quantity of labor hours.

- **Internal Services Allocated:** The budget for Internal allocated is \$70.4 million. It is increasing by \$4.8 million over 2018 budget. This increase is driven by additional work for Facilities & Maintenance, support of changes to high voltage/electrical grounding procedures to comply with Cal-OSHA Title 8 rules, training requirements for Security staff and anticipated fuel cost increases.
- **Technology Allocated:** Technology Allocated in the 2019 budget is \$59.8 million, an increase of \$8.4 million over 2018 budget. 2019 reflects increased labor and outside services costs for ongoing support of enterprise systems, the new Data Analytics and Network Transformation efforts, as well as support of Energy Trading systems. Additionally, 2019 reflects increases in maintenance and support costs for the SAP Enterprise system, Smart Meter network support services hosting fees (Silver Spring Networks), new distribution and sub-transmission design tool, Enterprise document management system and information security systems.

Specific information is provided within Internal & Technology Business Unit Documentation

# Position Count Summary



Executive Hierarchy	2018 Full-time	2018 Limited Term	2018 Part-time	2018 Approved Positions	2019 Full-time	2019 Limited Term	2019 Part-time	2019 Positions Planned	Increase/Decrease
CEO & General Manager	38	5	2	45	33	21	9	63	18
Chief Legal Officer	41	1	2	44	42	2	4	48	4
Chief Financial Officer	84	8	10	102	91	2	10	103	1
Chief Energy Delivery Officer	694	16	14	724	698	19	14	731	7
Chief Grid Strategy & Operations Officer	286	4	23	313	286	3	23	312	(1)
Chief Customer Officer	411	22	101	534	409	22	102	533	(1)
Chief Workforce Officer	365	15	9	389	369	15	10	394	5
Chief Information Officer	230	9	30	269	240	12	43	295	26
<b>Full-time</b>				<b>2,149</b>				<b>2,168</b>	<b>19</b>
<b>Limited Term</b>				<b>80</b>				<b>96</b>	<b>16</b>
<b>Part-time</b>				<b>191</b>				<b>215</b>	<b>24</b>
<b>SMUD Total [1]</b>	<b>2,149</b>	<b>80</b>	<b>191</b>	<b>2,420</b>	<b>2,168</b>	<b>96</b>	<b>215</b>	<b>2,479</b>	<b>59</b>

[1] The 2019 position count change from 2018 is +59; however, the 2019 funding level change is increasing by 56 full-time equivalent (FTE) positions based on planned hours. The difference between position count and FTE is to account for vacancies during the hiring process and part-time positions.

**Position Count:** The full-time count is identified in the Board Resolution and the budget provides funding for less than the total position count to account for vacancies during the hiring process.

# Labor Cost Summary



Executive Hierarchy (\$000)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frcst	% Change vs Frcst
CEO & General Manager	\$7,381	\$7,750	\$8,543	\$794	16%
Chief Legal Officer	5,461	5,732	6,160	427	13%
Chief Financial Officer	10,893	10,836	11,308	472	4%
Chief Generation & Grid Assets Officer	91,736	93,999	95,917	1,918	5%
Chief Grid Strategy & Operations Officer	39,559	40,048	42,565	2,517	8%
Chief Customer Officer	43,768	45,171	44,935	(236)	3%
Chief Workforce Officer	38,785	38,297	39,971	1,674	3%
Chief Information Officer	30,777	30,662	34,511	3,849	12%
<b>Salaries &amp; Wages*</b>	\$252,356	\$252,539	\$267,104	\$14,565	5.8%
<b>Overtime</b>	\$16,004	\$19,956	\$16,807	(\$3,149)	5.0%
<b>SMUD TOTAL</b>	<b>\$268,360</b>	<b>\$272,495</b>	<b>\$283,911</b>	<b>\$11,416</b>	<b>4.3%</b>

\*Salaries & Wages includes paid leave ----- 2018 Budget not adjusted for any organizational realignment

**Labor Salaries:** The labor summary reflects the cost of wages for SMUD employees. The budget for labor and associated benefit costs is included on the previous budget summary pages.



# 2019 Budget Debt Service

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The following schedules show the summary and details of the 2019 Budget for Debt Service. SMUD issues Electric Revenue Bonds and Commercial Paper Notes to finance long-lived capital assets. The Debt Service Budget includes accrued interest expense on outstanding Electric Revenue Bonds and Commercial Paper Notes, net of any swap revenues tied to debt issues, scheduled principal repayments of Bonds and Commercial Paper, trustee fees associated with administration of debt service payments, and interest expense and issuance costs associated with planned new debt issues.

**Revenue Bond Interest** totals \$92.6 million in the 2019 Budget, an increase of \$3.5 million from 2018.

**Commercial Paper Interest** totals \$10.6 million in the 2019 Budget, an increase of \$6.5 million from 2018. Short-term interest rates assumed for 2019 are slightly higher than those assumed for 2018 and there is an increase to the commercial paper program of \$88.8 million.

**Scheduled Principal Repayments** of revenue bonds and commercial paper notes total \$87.4 million in 2019, a \$11.1 million increase from 2018.

**Trustee and Rating Agency Fees** of \$270 thousand are similar to the amount budgeted in 2018.

**Bond Issuance Costs** of \$1.5 million are included for two new 2019 bond issuances.

# Debt Service Budget (continued)



Summary (\$000s)	2018 Budget	2018 Forecast	2019 Proposed	\$ Change vs Frcst	% Change vs Frcst
Interest Expense <span style="float: right;"><i>[1]</i></span>	\$95,198	\$93,207	\$103,208	\$10,001	11%
Principal Repayments	90,920	76,300	87,425	11,125	15%
Trustee & Rating Agency Fees	250	243	270	27	11%
Bond Issuance Costs	1,120	600	1,493	893	149%
<b>Total Debt Service</b>	<b>\$187,488</b>	<b>\$170,350</b>	<b>\$192,397</b>	<b>\$22,046</b>	<b>13%</b>
Allocated to JPAs	(6,389)	(6,389)	(6,314)	75	-1%
<b>NET DEBT SERVICE</b>	<b>\$181,099</b>	<b>\$163,962</b>	<b>\$186,083</b>	<b>\$22,121</b>	<b>13%</b>

*[1] Build America Bonds are shown gross of the rebate of \$9.2 million expected in 2019. The budget authorization is requested gross of the rebate. Includes net debt related swap payments and interest on long-term, variable rate, and subordinated debt. Assumes an interest rate of 2.66% (incl. all related fees & swaps) on avg. commercial paper balance of \$288.75 million.*

The Debt Service component of the 2019 Proposed totals \$192.4 million, an increase of \$4.9 million or 13% percent over 2018. The increase is due to a normal fluctuation in debt service schedules.

Interest expense represents accrued interest on revenue bonds and commercial paper, net of any related swap revenue. The credit for debt service charged to the JPAs represents the portion of the interest expense on the District's investments in the PG&E Line 301/400 pipeline, the local gas pipeline (including Cosumnes extension) and the Rosa natural gas reserves which is allocated to the cogeneration plants for fuel delivery and included in the SMUD and JPA budgets under fuel commodity. Principal repayments represent scheduled repayment of revenue bonds and commercial paper notes.

# Debt Service Budget (continued)



SUMMARY OF DEBT SERVICE ON EXISTING SMUD BOND ISSUES (\$000'S)						
Date Issued	Issue	1/1/2019 Principal Balance	Issued Interest Rate	Final Maturity Date	2019 Scheduled Principal Payment	2019 Interest Expense
<b>Electric Revenue Bonds</b>						
Jun-97	Series K <sup>1</sup>	103,455	5.25% to 5.90%	2024	14,985	1,815
May-08	Series U (Refunding)	0	3.00% to 5.00%	2028	-	0
May-09	Series V <sup>2</sup>	200,000	6.322% (4.11% net)	2036	-	12,644
Jul-10	Series W <sup>3</sup>	250,000	6.156% (4.00% net)	2036	-	15,390
Sep-11	Series X (Refunding)	210,825	1.50% to 5.00%	2036	22,385	10,022
Jan-12	Series Y (Refunding)	180,395	3.00% to 5.00%	2033	5,330	8,652
May-13	Series A	132,020	3.75% and 5.00%	2041	-	6,592
May-13	Series B (Refunding)	93,975	3.00% to 5.00%	2033	3,340	4,487
Jul-16	Series D (Refunding)	149,890	5.00%	2028	10,085	7,152
Dec-17	Series E (Refunding) <sup>4</sup>	187,515	3.00% to 5.00%	2028	16,760	9,059
Aug-18	Series F (Refunding)	165,515	5.00%	2028	14,540	8,001
Apr-19	Series G <sup>5</sup>	0	5.00%	2049	-	8,750
Subtotal		1,673,590			87,425	92,564
<b>Total Outstanding Bonds</b>		<b>\$1,673,590</b>	<b>Principal &amp; Interest Payments</b>		<b>87,425</b>	<b>92,564</b>
<b>Total Debt Service</b>					<b>\$87,425</b>	<b>\$92,564</b>

1) Swapped to a variable rate for the life of the debt, interest expense net of swap payment. Interest expense without swap would be \$5,182,265.

2) Interest expense gross of federal government Build America Bond rebate of \$4,151,025.

3) Interest expense gross of federal government Build America Bond rebate of \$5,052,537.

4) Refunding issue forecast for 2017.

5) New money issue forecast for 2018.

# 2019 Budget

## Business Forecast

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The 2019 business forecast is a set of pro forma (projected) financial statements, which are derived from the 2019 Budget. The financial statements depict the expected results of operations (Income Statement) and cash position (sources and uses of cash) at the end of the 2019 budget year. The business forecast also includes "non-cash" expenses such as depreciation and amortization of capital and regulatory assets, which are not included in the 2019 Budget because funds were expended in prior budget years. SMUD's budget presents costs on a business unit basis, which is very similar to FERC groupings.

The pro forma financial statements include the consolidated accounts and operations of SMUD, the Central Valley Financing Authority (CVFA), the Sacramento Cogeneration Authority (SCA), the Sacramento Power Authority (SPA), the Sacramento Financing Authority (SFA) and the Northern California Gas Agency No. 1 (NCGA No. 1). CVFA, SCA, SPA and SFA are joint powers agencies between SMUD and other entities which have issued debt to construct the Carson Cogeneration plant, Procter & Gamble Cogeneration plant, Campbell Soup Cogeneration plant and the Cosumnes Power Plant, respectively, and own and operate the plants. SMUD has entered into Power Purchase Agreements with CVFA, SCA, SPA and SFA, to purchase all of the plants' output and pay for JPA and plant costs. NCGA No. 1 is a joint powers agency that has issued bonds and used the proceeds to prepay long-term natural gas supply contracts. SMUD has entered into an agreement to buy all of the gas procured by NCGA No. 1, but is not liable for repayment of the bonds in the event of a default. The relationship between SMUD, CVFA, SCA, SPA, SFA and NCGA No. 1 meets the criteria established by the Governmental Accounting Standards Board for consolidation in the controlling entity's financial statements.

The budgeted and actual fixed charge ratio and net income as shown on the Pro Forma Income Statement are primary measures of SMUD's financial performance which are monitored closely by the bond rating agencies in setting SMUD's bond rating. The fixed charge ratio is a measure of the number of times net operating cash flow before interest expense covers total cash debt service payments, including both interest and principal, for SMUD, the JPAs and SMUD's share of TANC debt service. Net income is the residual after deducting all expenses from revenues for the period.

The 2019 Budget will produce \$61 million of net income for SMUD; this is a decrease of \$69 million from the 2018 Budget. The fixed charge coverage is planned at 1.76 times operating cash flow.

SMUD's unrestricted cash balance is forecasted to be \$394 million at the end of 2019. There is a new money issue planned in 2019 for \$300 million.

## Pro Forma Consolidated Income Statement

\$Millions	2018 Budget	2018 Forecast	2019 Proposed
<b>Operating Revenues:</b>			
Sales to Customers	\$1,433.2	\$1,406.3	\$1,406.6
RSF & Other Deferrals	2.5	9.1	8.3
Other Electric Revenue	31.1	36.7	30.3
<b>TOTAL OPERATING REVENUES</b>	<b>1,466.7</b>	<b>1,452.0</b>	<b>1,445.2</b>
<b>Operating Expenses:</b>			
Commodities	435.1	426.2	448.1
Energy Delivery	79.2	79.5	84.5
Energy Operations	209.0	201.5	204.3
Customer/Community	113.7	110.7	122.0
Internal	43.1	56.0	43.5
Technology	37.5	34.6	39.3
Corporate	63.0	60.2	78.0
Public Good (including EAPR & MED Discount)	96.1	94.2	93.9
<b>Total Operations</b>	<b>1,076.6</b>	<b>1,062.8</b>	<b>1,113.7</b>
Depreciation, Depletion, and Amortization	199.9	200.5	215.9
<b>TOTAL OPERATING EXPENSES</b>	<b>1,276.5</b>	<b>1,263.3</b>	<b>1,329.6</b>
<b>NET OPERATING INCOME</b>	<b>\$190.2</b>	<b>\$188.7</b>	<b>\$115.6</b>

**Note:** The allocated portion of the Internal and Technology costs are included in each of the operating expense line items above and costs are allocated based on the quantity of labor hours. Some of the budget for Customer/Community and Energy Operations is included on other line items in the Pro Forma Consolidated Income Statement.

# Business Forecast (continued)



## Pro Forma Consolidated Income Statement

\$Millions	2018 Budget	2018 Forecast	2019 Proposed
<b>Other (Income) Expenses:</b>			
Interest Income and Other	(\$11.4)	(\$58.5)	(\$15.0)
Other Non Cash	(15.1)	(10.5)	(13.0)
<b>TOTAL INTEREST INCOME &amp; OTHER</b>	<b>(26.4)</b>	<b>(69.0)</b>	<b>(28.1)</b>
<b>Interest Expense:</b>			
Interest expense	87.5	79.4	83.1
<b>NET INTEREST CHARGES</b>	<b>87.5</b>	<b>79.4</b>	<b>83.1</b>
<b>CHANGE IN NET POSITION - NET INCOME (LOSS)</b>	<b>\$129.1</b>	<b>\$178.2</b>	<b>\$60.5</b>
Interest Payments	97.5	94.2	95.9
Principal Payments	123.0	108.4	117.5
<b>TOTAL FIXED COSTS</b>	<b>242.2</b>	<b>236.3</b>	<b>239.4</b>
<b>Cash Available to Pay Fixed Costs</b>	<b>436.4</b>	<b>440.5</b>	<b>375.2</b>
<b>FIXED CHARGE COVERAGE RATIO</b>	<b>1.98</b>	<b>2.17</b>	<b>1.76</b>
<b>RATE STABILIZATION FUND</b>	<b>39.6</b>	<b>31.8</b>	<b>31.8</b>



**Commodities:** The Commodities budget includes the long, medium and short-term power, electric transmission and natural gas purchases. The budget is shown net of surplus and wholesale power sales revenue, which represents revenues from the sale of generation and bulk power purchases which are surplus to our generation needs.

**Energy Operations:** The Energy Operations budget includes system planning, the cost for the staff support for the development, procurement and administration of our power and gas contracts, and costs for the dispatch of generation resources, research and development, and distributed energy strategy.

**Energy Delivery:** The Energy Delivery budget includes Gas Pipeline O&M, costs to generate electricity and maintain SMUD-owned generating assets including Carson Cogeneration, Procter & Gamble, Campbell Soup, and Cosumnes power plants, SMUD's hydroelectric generation reservoirs and powerhouses, and solar and wind generation assets. It also includes transmission, line inspections, corrective and preventative maintenance on lines and substations, tree trimming, and underground cable work.

**Customer/Community:** The Customer/Community budget includes customer communication and education channels including the call center and electronic communication, demand response programs, loan programs, Greenergy®, new products and services, rate development, economic development, and uncollectible customer revenues.

**Internal Services:** The Internal Services budget includes the cost of worker's compensation and other post employment benefits, Rancho Seco park, and emergency preparedness.

**Technology:** The Technology budget includes the cost of planning for future technology projects and implementation of third-party hosted technology projects for other business units.

**Corporate:** The Corporate budget includes the development of SMUD's long-term business plan and its integration with the annual operating budget, risk management, and enterprise performance. This business unit is responsible for internal auditing, SMUD accounting and financial reporting and treasury operations, financial planning and forecasting, and property and casualty insurance. This unit also has the responsibility for all legal matters to which SMUD is a party or in which it is legally interested, enterprise records, management and coordination of government relations, legislative matters and regulatory requirements affecting SMUD, and is responsible for implementation and compliance with all Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC) compliance standards and requirements.

**Public Good:** The public good budget line item was added in 1998 based on policy changes approved by the Board and implemented May 1, 1998. Public Goods programs include customer public good programs such as PV rebates and incentives, low income & medical rate subsidies and administration, emerging technologies, energy advisory, Sacramento Shade, appliance efficiency, and whole house performance. It also includes energy operations public good programs such as EV charging, renewable initiatives such as biomass gasification, and distributed technology.

**Depreciation, Depletion and Amortization:** The depreciation, depletion and amortization budget is the depreciation of SMUD's electric utility plant-in-service and the Carson Cogeneration, Procter & Gamble cogeneration, Campbell Soup cogeneration and Cosumnes plants. The Budget amount is based on existing plant-in-service and estimated completion dates for construction-work-in-progress, and the most-current depreciation rates. It also includes depletion of our Rosa gas field, amortization of costs associated with the new operating license for SMUD's Upper American River Project (UARP) hydroelectric generation facilities, and Rancho Seco fuel decommissioning .

**Interest Income and Other:** The interest income and other budget is SMUD's interest income, based on the assumption that SMUD will earn an average of approximately 1.3 percent on unrestricted and restricted cash balances. This line also includes interest income on energy efficiency loans to customers, and any interest earned by CVFA, SCA, SPA, SFA and NCGA No. 1 on their fund balances. Also included in this line is miscellaneous income.

**Other Non Cash:** The other non cash budget includes Allowance for Funds Used During Construction (AFUDC), which represents the interest cost of funds used during construction. It also includes write-off of preliminary project costs, which is an estimate of costs to be written off related to projects which SMUD has deferred preliminary costs until feasibility or planning studies can be completed and final determination can be made on whether such projects will actually be developed. It also includes the corporate capital surcharge. Another item included is Contribution in Aid of Construction (CIAC). This represents the recognition of money received for prior development costs and for grant projects for capital items. The receipt of funds being recognized on the income statement is made in order to match the money received with the depreciation. It also includes advance capacity payments, as well as Fuel Sales to SMUD from NCGA and uncollectable accounts on loan and other billings, as well as some JPA allocations.

**Interest Expense:** The interest expense budget includes interest on long-term debt and commercial paper reflects SMUD's obligation for existing debt, and interest expense on CVFA, SCA, SFA and NCGA No. 1 bonds.

**Fixed Charge Coverage Ratio:** The fixed charge coverage ratio is a measure of the number of times net cash flow before interest expense on a consolidated basis covers total cash debt service payments, including both interest and principal, for SMUD, the JPAs and SMUD's share of TANC debt service.

**Interest Payments:** Represents the cash basis interest payments on SMUD, CVFA, SCA, SFA and NCGA No.1 bonds, commercial paper notes, and SMUD's share of TANC bonds, not including amortization of deferred bond issuance costs and gain/loss on bond refundings.

**Principal Payments:** Represents scheduled repayment of long-term debt.

**Cash Available to Pay Fixed Costs:** Represents the net cash flow before interest expense on a consolidated basis.

**Unrestricted Cash:** Cash available for operating and capital expenditures. Detail of change is shown on the 2019 Pro Forma Sources and Uses of Cash.

**Restricted for Debt Service:** Amounts deposited in restricted debt service funds as fixed by Bond Resolutions.

**Rate Stabilization Fund:** This is a fund set up by the Board to provide a cushion against a rate increase in years where weather conditions or other non-controllable events cause large budget variances. No transfers in or out of the Rate Stabilization Funds are budgeted.

**Decommissioning Fund:** Amounts set aside with external trustee to cover estimated cost of decommissioning Rancho Seco. SMUD received a certification of completion of decommissioning from the Nuclear Regulatory Commission (NRC) in 2009. The remaining funds are for decommissioning of the spent fuel storage facility in 2028.

# Business Forecast (continued)



## Pro Forma Statement of Cash Flows

<b>Operating Sources of Funds:</b>	<b>2019 Budget</b>
Receipts from Customers	1,376
Other Electric Revenue	36
<b>Total Operating Sources of Funds:</b>	<b>1,412</b>
<b>Operating Uses of Funds:</b>	
Net Operating Expenses	625
Commodity Expenses	419
<b>Total Operating Uses of Funds:</b>	<b>1,044</b>
<b>Net Source of Funds from Operations:</b>	<b>368</b>
<b>Financing Sources of Funds:</b>	
Proceeds from Debt Issuance	200
Commercial Paper Issuance	100
<b>Total Financing Sources of Funds:</b>	<b>300</b>
<b>Financing Uses of Funds:</b>	
Capital Expenditures	444
Net Loans	1
Principal Payments on Debt	110
Interest Payments on Debt	91
<b>Total Financing Uses of Funds</b>	<b>646</b>
<b>Net (Use) of Funds from Financing:</b>	<b>(346)</b>
<b>Investing Sources of Funds:</b>	
Interest Income	14
<b>Net Source of Funds from Investing:</b>	<b>14</b>
<b>Net Use of Funds from 2019 Budget</b>	<b>37</b>
<b>PROJECTED UNRESTRICTED CASH BALANCE @ 1/1/19</b>	<b>373</b>
Net Cash Outflow from 2019 Budget	(263)
New Debt & Commercial Paper Issue	300
Net Change in Debt Service Reserve Funds	0
Transfer from Unrestricted to Restricted	(16)
<b>PROJECTED UNRESTRICTED CASH BALANCE @ 12/31/19</b>	<b>394</b>

## Overview of the 2019 Pro Forma Statement of Cash Flows

The 2019 Pro Forma Cash Flow Statement shows the budgeted sources and uses of cash and the projected year-end unrestricted cash balance for 2019. SMUD's current practice is to maintain unrestricted cash and Rate Stabilization Fund balances at a minimum of 130 days cash on hand, or approximately \$380 million. At the end of 2019, SMUD's unrestricted cash balance is projected to be \$394 million, in addition to the Rate Stabilization Fund balance of \$32 million. The Hydro Rate Stabilization Fund balance, which is expected to be \$64 million, is not included in this target minimum.

SMUD generates positive net cash flow from operations because of net income and non-cash expenses such as depreciation and amortization. In 2019, cash generated from operations is estimated to total approximately \$368 million. The primary uses of this cash are capital investment, net loans to customers, and scheduled debt principal repayments and interest payments. The 2019 Budget for capital investment totals \$443 million. Scheduled debt principal repayments in 2019 total \$87 million for SMUD and \$23 million for the JPAs.