

# 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 Frcst	% Change vs Frcst
<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

Powering forward. Together.



# Debt Service Budget

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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.