

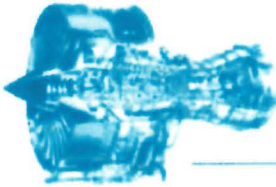
**DRAFT**

**BOARD FINANCE COMMITTEE REVIEW**

**2020 PROPOSED BUDGET**

**SACRAMENTO COGENERATION AUTHORITY**

**November 2019**



**Sacramento  
Cogeneration  
Authority**

P.O.Box 15830, Sacramento, CA 95852-1830

SCA Cogeneration Project

October 21, 2019  
SCA 19-006

**TO: SCA COMMISSION**  
**SUBJECT: 2020 PROPOSED SCA BUDGET**

We are pleased to present the proposed 2020 Operating Budget for the Sacramento Cogeneration Authority (SCA). This budget represents the anticipated expenses for the twenty-second full year of operation for the 164.3 MW SCA Procter & Gamble Cogeneration Plant.

The Combined Cycle Plant has operated successfully since commercial operation began on March 1, 1997, and the Peaking Plant has operated successfully since it achieved commercial status on April 24, 2001. SMUD will be purchasing all of the electrical energy generated, and the Procter & Gamble Manufacturing Company will be purchasing steam produced by the Plant.

The Operating Budget for the Authority for the period of January 1, 2020 to December 31, 2020 totals \$29,310,883 for Operations & Maintenance and \$1,646,555 for Administrative & General. Should you have any questions regarding this proposed 2020 Operating Budget, please don't hesitate to contact me at (916) 732-6227.

Sincerely,

**Brad Jones**  
Manager, Thermal Generation Assets



## **2020 SCA BUDGET**

The Sacramento Cogeneration Authority (SCA) is a Joint Powers Agency (JPA) formed in 1993 by Sacramento Municipal Utility District (SMUD) and the SMUD Financing Authority (SFA) for the purpose of acquiring, constructing, financing and operating the SCA Procter & Gamble Cogeneration Project (Project). SCA sold Cogeneration Project Revenue Bonds (Bonds) in May 1995 and the proceeds have been used to construct the Project. The Project has been in commercial operation since March 1, 1997. In August 2009, SCA sold Cogeneration Project Revenue Refunding Bonds (Refunding Bonds), completely retiring all previously issued Bonds and restructuring the Power Purchase Agreement (PPA) between SCA and SMUD. In September 2019, SCA completely retired all of the outstanding Refunding Bonds and again restructured the PPA between SCA and SMUD.

The Project, also known as SCA Cogen II, is located adjacent to the Procter & Gamble Manufacturing Company (Procter & Gamble) in Sacramento County. The plant consists of two clean-burning gas-fired combined cycle gas turbine generator units, one steam turbine generator unit, and one simple cycle gas turbine for a combined capacity of 190.3 MW. Besides electricity, the plant generates steam, which is sold to Procter & Gamble. The plant burns natural gas, which is supplied through a natural gas pipeline owned and operated by SMUD. SMUD has designed and built transmission and telecommunications facilities to integrate the plant into SMUD's electrical system.

This 2020 SCA budget covers the expected financial operations of SCA and the Project from January 1, 2020 through December 31, 2020. The budget is divided into two parts. The first part is the expense budget as shown on the Budget Summary. These budgets represent expenses to be incurred and/or paid by SCA in 2020 in the course of running the Project and conducting the business of SCA. The second part of the budget lists capital and other expenditures proposed for 2020. Also included in this document is a pro forma financial statement. This statement incorporates SCA revenues and non-cash expenses such as depreciation to show the complete financial results of operations for the year.

The operation of SCA and the Project is governed by a series of agreements among the JPA members and outside parties. A description of these agreements follows:

**JOINT POWERS AGREEMENT (JPA)** between SMUD and SCA. SCA has no employees; SMUD will provide technical and administrative services for SCA pursuant to the PPA. The SCA Board consists of the SMUD Board.

**POWER PURCHASE AGREEMENT (PPA)** between SMUD and SCA. SCA has agreed to sell to SMUD and SMUD has agreed to purchase the energy and capacity from the Project. SMUD will pay SCA for its costs whether the Project is operating. This agreement will be in effect until terminated by SMUD, but in no case before the bonds are paid in full. This agreement covers the terms of how the Project will be operated (SMUD will dispatch) and the calculation of payments from SMUD to SCA for operation of the Project.

**GAS SUPPLY AGREEMENT (GSA)** between SMUD and SCA. SMUD will arrange for all natural gas supply and transportation requirements for SCA. SMUD will charge SCA for SMUD's actual supply and transportation costs properly allocable to the Project.

**OPERATIONS & MAINTENANCE AGREEMENT (O&M AGREEMENT)** between SCA and EthosEnergy Power Plant Services (Ethos), the plant operator. SCA has contracted with Ethos to operate, repair, overhaul and maintain the Project for a five-year term effective January 1, 2016, in exchange for payments tied to specified plant performance standards. This agreement includes a one-sided renewal clause that SCA may choose, at its sole discretion, to exercise, potentially extending the agreement for a second five-year term.

**STEAM SALES AGREEMENT** between SMUD and Procter & Gamble, and Steam Services Agreement assigning SMUD's rights to SCA. These agreements cover the terms and conditions of steam sales from SCA to Procter & Gamble.

**SACRAMENTO COGENERATION AUTHORITY  
2020  
BUDGET SUMMARY**

	2019 BUDGET	2020 BUDGET	NET CHANGE PERCENT
<b>GENERATION (MWh)</b>	760,778	600,858	-21%
<b>FUEL</b>			
Combined Cycle Gas Expenses	\$21,738,361	\$19,503,421	-10%
Peaker Plant Gas Expenses	\$1,977,979	\$51,569	-97%
Natural Gas Commodity (\$ /MMBtu)	\$2.86	\$3.09	
Auxiliary Boiler Fuel Costs	\$1,842,054	\$1,446,847	-21%
<b>TOTAL FUEL EXPENSES</b>	<b>\$25,558,393</b>	<b>\$21,001,837</b>	<b>-18%</b>
<b>PLANT OPERATION &amp; MAINTENANCE</b>			
Station Service Energy Costs	\$359,938	\$370,738	3%
Operator Fixed Fees	\$2,517,770	\$2,580,717	3%
Operator Reimbursable Expenses	\$2,453,588	\$3,190,703	30%
Operator Availability Bonus	\$746,820	\$765,494	3%
Lease Engine Program	\$175,792	\$181,066	3%
JPA Administrative and Other Expenses	\$433,673	\$445,328	3%
Engine Overhaul Expense	\$175,000	\$775,000	343%
<b>TOTAL PLANT OPERATION &amp; MAINTENANCE</b>	<b>\$6,862,581</b>	<b>\$8,309,046</b>	<b>21%</b>
<b>TOTAL O&amp;M COSTS</b>	<b>\$32,420,974</b>	<b>\$29,310,883</b>	<b>-10%</b>
<b>ADMINISTRATIVE &amp; GENERAL</b>			
SMUD Labor	\$442,400	\$452,850	2%
SMUD Administrative & General	\$74,470	\$78,670	6%
Insurance	\$1,061,378	\$1,115,035	5%
<b>TOTAL ADMINISTRATIVE &amp; GENERAL</b>	<b>\$1,578,248</b>	<b>\$1,646,555</b>	<b>4%</b>
<b>INTEREST EXPENSE</b>			
Interest on SCA Bonds	\$829,838	\$0	-100%
<b>DEBT SERVICE PRINCIPAL REPAYMENT</b>			
SCA Bond Principal Repayment	\$6,162,500	\$0	-100%
<b>PLANNED CAPITAL EXPENSES</b>	\$0	\$0	
<b>TOTAL PRINCIPAL, INTEREST &amp; CAPITAL EXPENDITURES</b>	<b>\$6,992,338</b>	<b>\$0</b>	<b>-100%</b>

## **2020 SCA BUDGET ASSUMPTIONS**

The 2020 SCA Budget is based on the following assumptions:

**PLANNED GENERATION** from the Project during the January 1, 2020 to December 31, 2020 budget period, as taken from SMUD's 2020 Resource Operating Plan (ROP), dated October 1, 2019, is 599,572 MWh for the combined cycle and 1,285 MWh for the peaker, for a grand total of 600,858 MWh. Monthly generation is shown on the Operating Assumptions table later in this document.

**HEAT RATE** is based on loading assumptions from the ROP and averages 8,294 Btu/KWh for the combined cycle and 10,566 Btu/KWh for the peaker.

**NATURAL GAS PRICES** are based on SMUD's actual costs obligated to firm natural gas purchases and estimates for the non-firm portion prepared by SMUD's Energy Trading & Contracts group. The variable rate is based on the latest available Petroleum Industry Research Associates forecast of commodity prices by month for 2020, plus 3.2% fuel use. The fixed component represents SCA's pro rata share of fixed capacity costs on the Alberta Gas Company/NOVA Corporation of Alberta/Pacific Gas Transmission Company (ANG/NOVA/PGT) interstate pipelines, and its pro rata share of depreciation, interest and O&M costs on SMUD's ownership interest in the Pacific Gas & Electric (PG&E) Line 300/401 interstate pipeline and SMUD's local gas pipeline. The monthly prices are shown on the Operating Assumptions page.

**FIXED OPERATING FEE** to be paid from SCA to Ethos is based on the flat annual base operating fee per the O&M Agreement. This payment is assumed to cover all direct and indirect labor costs, including benefits, taxes, insurance, home office support, management and supervision incurred by Ethos. This payment escalates in future years at 2.5% per year in accordance with the existing O&M Agreement.

**NET DEPENDABLE CAPACITY (NDC)** for budget purposes for the Combined Cycle Plant is assumed to be 120,370 kW, based on NDC tests performed during acceptance testing in 1997. NDC for the Peaking Plant is assumed to be 44,000 kW.

**REIMBURSABLE OPERATING COSTS** to be paid from SCA to Ethos is based on estimated variable plant operating costs, excluding fuel, to be incurred by Ethos in 2020.

**STEAM SALES REVENUE** is based on estimates of steam delivery to Procter & Gamble and estimated prices per the Steam Sales Agreement.

**MAINTENANCE/OVERHAUL EXPENSE** The budget is based on direct SCA expenditures for scheduled maintenance or overhaul activities performed by Ethos, SMUD or an independent outside contractor.

**2020 SCA BUDGET DETAIL  
OPERATING ASSUMPTIONS**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Resource Operating Plan:</b>													
<b>Combined Cycle Power Plant:</b>													
Capacity (Megawatts Net)	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3
Generation (MWh)	46,456	70,901	26,406	7,632	4,896	9,453	66,200	87,271	80,394	43,242	73,446	83,275	599,572
Natural Gas (1000's of MMBtu)	381	580	217	64	42	79	556	718	666	355	601	690	4,949
Model Average Heat Rate (Btu/kWh)	8,207	8,187	8,199	8,352	8,615	8,387	8,396	8,230	8,282	8,209	8,180	8,282	8,294
Budgeted Availability (IEEE)	78%	98%	98%	75%	100%	98%	98%	100%	98%	78%	98%	98%	93%
<b>Peaking Power Plant:</b>													
Capacity (Megawatts Net)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Generation (MWh)	-	-	-	-	-	158	588	539	-	-	-	-	1,285
Natural Gas (1000's of MMBtu)	-	-	-	-	-	2	6	5	-	-	-	-	13
Model Average Heat Rate (Btu/kWh)	-	-	-	-	-	11,771	9,961	9,966	-	-	-	-	10,566
Budgeted Availability (IEEE)	78%	100%	98%	74%	100%	98%	100%	100%	98%	78%	100%	98%	94%
<b>Average Steam to P&amp;G</b>	<b>65.6</b>	<b>65.4</b>	<b>61.5</b>	<b>60.3</b>	<b>60.1</b>	<b>59.6</b>	<b>60.0</b>	<b>58.5</b>	<b>50.5</b>	<b>56.5</b>	<b>62.0</b>	<b>63.4</b>	<b>60.3</b>



## **2020 SCA BUDGET LINE ITEM DETAIL**

The following schedule shows a monthly breakdown of the line items within the SCA budget:

### **FUEL EXPENSE**

This schedule shows detail of the budgeted expense for fuel to be burned at the Project.

Natural gas is the primary fuel for the Project and will be procured by SMUD per the GSA. The gas will be delivered to the plant through SMUD's capacity interest on the ANG/NOVA/PGT and Line 300/401 interstate pipelines, or other contracted routes, and SMUD's local natural gas pipeline. The local natural gas pipeline, which became operational in April 1996, connects the Project (and three other local gas-fired power plants) to PG&E's interstate gas pipeline.

Under the GSA, SMUD will handle the actual procurement and transportation arrangements for the SCA. The assumed variable cost for natural gas is taken from the latest available SMUD forecast. The fuel budget also includes a pro rata share of fixed costs incurred by SMUD to own and operate its interest in the PG&E Line 300/401 pipeline and its local natural gas pipeline which connects the local generation plants to PG&E's gas pipeline. The fuel budget also includes a pro rata share of fixed costs associated with SMUD's partial ownership of the Rosa Unit Gas Reserves.

**2020 SCA BUDGET DETAIL  
FUEL EXPENSE**

Fuel Usage in Thousands of MMBtu/Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Combined Cycle Unit:</b>													
Comb Cycle Generation MWh Adjusted by 100%	46,456	70,901	26,406	7,632	4,896	9,453	66,200	87,271	80,394	43,242	73,446	83,275	599,572
Average Heat Rate Btu/kWh	8,207	8,187	8,199	8,352	8,615	8,387	8,396	8,230	8,282	8,209	8,180	8,282	8,294
Comb Cycle Fuel Usage (1000's of MMBtu)	381	580	217	64	42	79	556	718	666	355	601	690	4,949
<b>Peaker Unit:</b>													
Peaker Generation MWh Adjusted by 100%	-	-	-	-	-	158	588	539	-	-	-	-	1,285
Average Heat Rate Btu/kWh	-	-	-	-	-	11,771	9,961	9,966	-	-	-	-	10,566
Peaker Natural Gas Usage (1000's of MMBtu)	-	-	-	-	-	2	6	5	-	-	-	-	13
Auxiliary Boiler Fuel Usage (1000's of MMBtu)	24.752	5.744	37.064	46.856	50.312	46.192	10.64	0	0	26.48	5.744	0	254
<b>Total Fuel Usage (1000's of MMBtu)</b>	<b>406</b>	<b>586</b>	<b>254</b>	<b>111</b>	<b>92</b>	<b>127</b>	<b>572</b>	<b>724</b>	<b>666</b>	<b>381</b>	<b>607</b>	<b>690</b>	<b>5,216</b>
Natural Gas Fuel Price \$ / MMBtu	\$3.33	\$3.25	\$3.02	\$3.10	\$3.08	\$2.92	\$2.94	\$2.93	\$2.94	\$3.07	\$3.19	\$3.24	\$3.09
<b>Natural Gas Variable Expenses (Commodity)</b>	<b>\$1,353</b>	<b>\$1,907</b>	<b>\$766</b>	<b>\$343</b>	<b>\$285</b>	<b>\$372</b>	<b>\$1,685</b>	<b>\$2,124</b>	<b>\$1,961</b>	<b>\$1,171</b>	<b>\$1,936</b>	<b>\$2,231</b>	<b>\$16,133</b>
Demand, Storage, & Procurement	\$148	\$148	\$148	\$148	\$148	\$148	\$148	\$148	\$148	\$148	\$148	\$148	\$1,780
<b>Amortization of Deferred Capacity</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$6</b>	<b>\$76</b>
<b>SMUD Fixed Gas Expenses:</b>													
SMUD Pipeline Depreciation	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$14	\$165
SMUD Pipeline Interest Charges	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$142
SMUD Pipeline O&M Charges	\$87	\$87	\$87	\$87	\$87	\$87	\$87	\$87	\$87	\$87	\$87	\$87	\$1,039
<b>TOTAL SMUD Fixed Gas Expenses</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$112</b>	<b>\$1,346</b>
<b>PG&amp;E Line 300/401:</b>													
Line 300/401 Investment Amortization	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$32	\$383
Line 300/401 Interest Charges	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$260
Line 300/401 Property Taxes	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$88
Line 300/401 O&M Charges	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$9	\$105
<b>TOTAL PG&amp;E Line 300/401</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$70</b>	<b>\$836</b>
Rosa Interest	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$261
Rosa Depletion	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$47	\$570
<b>Rosa Unit total</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$69</b>	<b>\$830</b>
<b>Auxiliary Boiler Fuel Expenses</b>	<b>\$107</b>	<b>\$23</b>	<b>\$171</b>	<b>\$317</b>	<b>\$376</b>	<b>\$282</b>	<b>\$39</b>	<b>\$0</b>	<b>\$0</b>	<b>\$109</b>	<b>\$22</b>	<b>\$0</b>	<b>\$1,447</b>
Variable Aux Boiler Fuel Expense	\$82	\$19	\$112	\$145	\$155	\$135	\$31	\$0	\$0	\$81	\$18	\$0	\$780
Fixed Aux Boiler Fuel Expense	\$25	\$4	\$59	\$172	\$221	\$147	\$8	\$0	\$0	\$28	\$4	\$0	\$667
<b>Combined Cycle Fuel Expenses</b>	<b>\$1,652</b>	<b>\$2,290</b>	<b>\$1,000</b>	<b>\$432</b>	<b>\$315</b>	<b>\$484</b>	<b>\$2,031</b>	<b>\$2,510</b>	<b>\$2,367</b>	<b>\$1,467</b>	<b>\$2,319</b>	<b>\$2,637</b>	<b>\$19,503</b>
Variable Combined Cycle Fuel Expenses	\$1,271	\$1,888	\$654	\$198	\$130	\$232	\$1,637	\$2,108	\$1,961	\$1,089	\$1,917	\$2,231	\$15,315
Fixed Combined Cycle Fuel Expenses	\$381	\$402	\$346	\$234	\$185	\$253	\$394	\$403	\$406	\$378	\$402	\$406	\$4,188
<b>Peaker Plant Fuel Expenses</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11</b>	<b>\$21</b>	<b>\$19</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$52</b>
Variable Peaker Plant Fuel Expenses	\$0	\$0	\$0	\$0	\$0	\$5	\$17	\$16	\$0	\$0	\$0	\$0	\$38
Fixed Peaker Plant Fuel Expenses	\$0	\$0	\$0	\$0	\$0	\$6	\$4	\$3	\$0	\$0	\$0	\$0	\$13
Line 300/401 capacity sales revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL FUEL EXPENSES</b>	<b>\$1,759</b>	<b>\$2,313</b>	<b>\$1,171</b>	<b>\$749</b>	<b>\$691</b>	<b>\$778</b>	<b>\$2,091</b>	<b>\$2,529</b>	<b>\$2,367</b>	<b>\$1,576</b>	<b>\$2,341</b>	<b>\$2,637</b>	<b>\$21,002</b>

## **2020 SCA BUDGET LINE ITEM DETAIL**

### **PLANT OPERATIONS & MAINTENANCE**

**OPERATOR FEES:** The budget for operator fees and plant operating expenses represents fees to be paid to Ethos, under the terms of the O&M Agreement, plus actual variable plant operating expenses incurred by Ethos and reimbursed from SCA without markup. The budget shows the reimbursement to Ethos as an operating expense.

Under the terms of the O&M Agreement, Ethos is reimbursed for all plant operating and maintenance expenses and repairs.

**PERFORMANCE BONUSES:** Ethos will earn availability bonuses under the O&M Agreement if the combined cycle Equivalent Forced Outage Factor is less than five percent (5%). Ethos will also earn bonuses for the simple cycle Peaker unit for maintaining a successful call-up ratio based on how well the unit starts and generates electricity when requested. A No-Deviant Steam bonus is available based on how well the plant provides for the steam needs of the Procter & Gamble facility. The 2020 budget assumes that Ethos will successfully earn all bonuses.

**LEASE ENGINE PROGRAM:** SCA has entered into an agreement whereby SCA will obtain access to a spare LM6000 combustion turbine generator within 72 hours from the time requested for the temporary replacement of an LM6000 gas turbine. This agreement significantly decreases the probability of prolonged outages and thereby enhances overall expected plant availability. This budget line item represents the estimated 2020 cost of the spare lease engine contracts for the Combined Cycle and Peaking Plants.

**STATION SERVICE ELECTRICITY:** SCA will pay SMUD under the terms of SMUD's Rules and Regulations for station service capacity and energy for the Project. The Project is connected to SMUD's system to ensure that power is available to run plant systems during planned or unplanned outages.

**WATER:** This line item represents the estimated cost of cooling and make-up water required to operate the Project and auxiliary boiler.

**SEWER:** This line item represents the estimated cost of maintaining the plant's connection to the Sacramento County sanitary sewer and associated fees for disposal of wastewater.

**2020 SCA BUDGET  
LINE ITEM DETAIL**

**SCA OPERATING AND ADMINISTRATIVE COSTS**

**OPERATING COSTS:** Under the terms of the O&M Agreement and PPA, various tests (heat rate, NDC, etc.) of plant operations may be required by SMUD or SCA during the year. This line item covers the estimated reimbursement to Ethos for performing such tests or for other items not covered by the O&M Agreement.

**2020 SCA BUDGET DETAIL  
PLANT OPERATION & MAINTENANCE**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Net Dependable Capacity CC (MW)	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3	120.3
Total Generation MWh (Combined & Peaker)	46,456	70,901	26,406	7,632	4,896	9,611	66,788	87,810	80,394	43,242	73,446	83,275	600,858
<b>OPERATOR FEES:</b>													
Fixed Fee Expenses	\$219	\$198	\$219	\$212	\$219	\$212	\$219	\$219	\$212	\$219	\$212	\$219	\$2,581
Reimbursable Operator Expenses	\$228	\$161	\$350	\$408	\$744	\$196	\$157	\$169	\$165	\$243	\$220	\$150	\$3,191
Availability Bonus - Combined Cycle	\$28	\$28	\$0	\$0	\$0	\$56	\$56	\$56	\$56	\$28	\$0	\$28	\$336
Availability Bonus - Peaker	\$11	\$11	\$6	\$6	\$6	\$11	\$11	\$11	\$11	\$11	\$6	\$11	\$110
Availability Bonus - No deviant steam	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$320	\$0	\$320
Overhaul Expenses	\$175	\$0	\$0	\$0	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$775
Operator Fees (less Overhaul Expenses)	\$486	\$398	\$574	\$626	\$968	\$475	\$443	\$456	\$444	\$501	\$757	\$408	\$6,537
<b>OTHER OPERATING EXPENSES:</b>													
Lease Engine Program	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$181
Station Service Energy Costs:	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$371
Water	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$356
Sewer	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$44
SMAQMD Title V Permit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15	\$0	\$15
Permit Fees (EPA, NPDES, State of CA)	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$30
Other Operating Expenses Total:	\$82	\$82	\$82	\$82	\$82	\$82	\$82	\$82	\$82	\$82	\$97	\$82	\$997
<b>TOTAL PLANT OPERATION &amp; MAINTENANCE</b>	<b>\$743</b>	<b>\$480</b>	<b>\$656</b>	<b>\$708</b>	<b>\$1,350</b>	<b>\$857</b>	<b>\$525</b>	<b>\$537</b>	<b>\$526</b>	<b>\$583</b>	<b>\$854</b>	<b>\$490</b>	<b>\$8,309</b>

## **2020 SCA BUDGET LINE ITEM DETAIL**

### **SMUD ADMINISTRATIVE & GENERAL**

Under the terms of the JPA, SMUD will provide staff to perform administrative and technical support services to SCA and arrange for insurance coverage, and SMUD will be reimbursed for the cost of providing these services subject to available funds per the priority of distribution of SCA revenues.

**INSURANCE:** Under the terms of the Indenture, SCA is required to maintain insurance as SMUD determines SCA may reasonably require.

**SMUD LABOR:** This line item represents the reimbursable portion of the cost of salaries and wages and associated employee benefits for SMUD employees from Power Generation, Projects Development, Gas Pipeline Operations, Treasury, Accounting, Risk Management, Budget Office, Legal, Electric System Design and others who will perform administrative and technical support services for SCA.

**OUTSIDE SERVICES:** SMUD will contract with engineering specialists to assist in engineering, permitting and licensing, or other issues which arise during operation.

**INDEPENDENT ENGINEER:** Under the terms of the Indenture, SCA will retain the services of an Independent Engineer to review the SCA Budget and provide independent oversight of SCA and Project operation.

**INDEPENDENT AUDITOR:** SCA retains the services of an Independent Auditor to audit and certify the SCA financial statements and evaluate internal controls applicable to SCA.

**2020 SCA BUDGET DETAIL  
ADMINISTRATIVE & GENERAL**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
INSURANCE (Property, B&M, and BI)	\$85	\$85	\$95	\$95	\$95	\$95	\$95	\$95	\$95	\$95	\$95	\$95	\$1,115
<b>SMUD Administrative &amp; General:</b>													
Independent Engineer	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$45
Independent Auditor	\$0	\$14	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$20
Outside Services (travel, vessel insp, WECC)	\$0	\$0	\$8	\$0	\$0	\$0	\$0	\$0	\$3	\$0	\$0	\$0	\$14
<b>SMUD Administrative &amp; General TOTAL:</b>	<b>\$4</b>	<b>\$18</b>	<b>\$15</b>	<b>\$4</b>	<b>\$4</b>	<b>\$4</b>	<b>\$4</b>	<b>\$4</b>	<b>\$7</b>	<b>\$4</b>	<b>\$4</b>	<b>\$7</b>	<b>\$79</b>
<b>SMUD Labor</b>	<b>\$37</b>	<b>\$34</b>	<b>\$37</b>	<b>\$39</b>	<b>\$36</b>	<b>\$44</b>	<b>\$40</b>	<b>\$34</b>	<b>\$38</b>	<b>\$35</b>	<b>\$37</b>	<b>\$41</b>	<b>\$453</b>
<b>TOTAL ADMINISTRATIVE &amp; GENERAL</b>	<b>\$126</b>	<b>\$136</b>	<b>\$147</b>	<b>\$138</b>	<b>\$134</b>	<b>\$143</b>	<b>\$139</b>	<b>\$133</b>	<b>\$139</b>	<b>\$134</b>	<b>\$136</b>	<b>\$142</b>	<b>\$1,647</b>

**2020 SCA BUDGET  
LINE ITEM DETAIL**

**CAPITAL EXPENDITURES**

SCA has no scheduled Capital Projects for 2020.



**2020 SCA BUDGET DETAIL  
CAPITAL EXPENDITURES**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Capital Expenses													
Plant Betterments (Released Fund):													
SCA Aux Boiler													\$0
Planned Capital Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL O&M COSTS (Including Capital Items)	\$2,628	\$2,929	\$1,974	\$1,594	\$2,176	\$1,777	\$2,755	\$3,199	\$3,031	\$2,293	\$3,331	\$3,270	\$30,957



## **2020 SCA BUDGET**

### **PRO FORMA FINANCIAL SCHEDULES**

SCA maintains its accounting records in accordance with Generally Accepted Accounting Principles and generally follows the Uniform System of Accounts for Public Utilities and Licensees prescribed by the Federal Energy Regulatory Commission (FERC). The following schedules are the Statements of Revenue, Expenses and Changes in Net Position and Revenue Detail Schedule, which show the projected results of operations, for SCA during the 2020 budget period based on the 2020 budget assumptions and expense and capital budgets.

#### **REVENUE DETAIL**

The following schedule details expected SCA Revenue during the 2020 budget period.

**ELECTRIC REVENUE:** Under the terms of the PPA, SMUD is obligated to make monthly Financial and Operating payments to SCA for capacity and energy provided by SCA. These payments are based on certain assumptions and rates, which were detailed under Budget Assumptions.

**OPERATING PAYMENT:** Under the terms of the PPA, SMUD will pay SCA an amount equal to the sum of all costs and expenses payable by the SCA pursuant to the Lease and Property Agreement, the O&M Agreement, the GSA, all insurance costs and any cost or expense otherwise incurred in the operation and maintenance of the Project, including capital improvements and overhaul expenses, plus \$130,000 per month to cover other SCA obligations.

**STEAM SALES REVENUE:** SCA will sell process steam generated by the plant to Procter & Gamble under the terms of the Steam Sales Agreement. Estimates derived from historical steam loads and steam tariff rates from this agreement have been used in the 2020 Budget.

**INTEREST INCOME:** SCA will earn interest on invested funds held as working capital. The budget assumes a 0% return on budgeted monies to be held in these funds.

**2020 SCA BUDGET DETAIL  
ELECTRIC REVENUE DETAIL**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>FINANCIAL PAYMENT</b>													
PPA Debt Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL FINANCIAL PAYMENT</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Operating Payment</b>													
Fixed Payment	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$130	\$1,560
O&M Agreement	\$486	\$398	\$574	\$626	\$968	\$475	\$443	\$456	\$444	\$501	\$757	\$408	\$6,537
Natural Gas Interconnection and Supply Agreement	\$1,759	\$2,313	\$1,171	\$749	\$691	\$778	\$2,091	\$2,529	\$2,367	\$1,576	\$2,341	\$2,637	\$21,002
Insurance Costs	\$0	\$0	\$1,095	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20	\$1,115
Overhaul Costs	\$175	\$0	\$0	\$0	\$300	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$775
Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Operating Costs										\$181			\$181
<b>TOTAL OPERATING PAYMENT</b>	<b>\$2,550</b>	<b>\$2,841</b>	<b>\$2,971</b>	<b>\$1,505</b>	<b>\$2,089</b>	<b>\$1,683</b>	<b>\$2,664</b>	<b>\$3,115</b>	<b>\$2,941</b>	<b>\$2,388</b>	<b>\$3,229</b>	<b>\$3,196</b>	<b>\$31,170</b>
<b>AGGREGATE PAYMENT</b>	<b>\$2,550</b>	<b>\$2,841</b>	<b>\$2,971</b>	<b>\$1,505</b>	<b>\$2,089</b>	<b>\$1,683</b>	<b>\$2,664</b>	<b>\$3,115</b>	<b>\$2,941</b>	<b>\$2,388</b>	<b>\$3,229</b>	<b>\$3,196</b>	<b>\$31,170</b>

**2020 SCA BUDGET DETAIL  
STEAM & OTHER REVENUE DETAIL**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>PROCTOR &amp; GAMBLE</b>													
PG&E Price Forecast (\$/MMBtu)	\$3.33	\$3.25	\$3.02	\$3.10	\$3.08	\$2.92	\$2.94	\$2.93	\$2.94	\$3.07	\$3.19	\$3.24	\$3.09
Steam Delivery (Klb / hour)	65.6	65.4	61.5	60.3	60.1	59.6	60.0	58.5	50.5	56.5	62.0	63.4	60.3
Operating Hours w/ availability @ 100%	744	672	744	720	744	720	744	744	720	744	720	744	8,760
Days in month	31	28	31	30	31	30	31	31	30	31	30	31	365
P & G Steam Delivery (million lb)	49	44	46	43	45	43	45	43	36	42	45	47	528
P & G Steam (Btu / lb)	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	14,352
P & G Steam Delivery (MMBtu)	58,408	52,595	54,760	51,943	53,461	51,349	53,354	52,019	43,521	50,284	53,346	56,450	631,489
Tier I Steam Price (\$/klb)	\$6.75	\$6.64	\$6.32	\$6.43	\$6.41	\$6.18	\$6.21	\$6.20	\$6.21	\$6.39	\$6.56	\$6.62	\$6.41
Tier II Steam Price (\$/klb)	\$4.54	\$4.44	\$4.15	\$4.25	\$4.23	\$4.03	\$4.06	\$4.05	\$4.06	\$4.21	\$4.36	\$4.42	\$4.23
<b>P &amp; G Steam Sales Revenue</b>	<b>\$288</b>	<b>\$261</b>	<b>\$255</b>	<b>\$250</b>	<b>\$254</b>	<b>\$238</b>	<b>\$246</b>	<b>\$241</b>	<b>\$212</b>	<b>\$242</b>	<b>\$260</b>	<b>\$274</b>	<b>\$3,022</b>
<b>Interest Income</b>													
Interest Income (Thousands \$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>STEAM, INTEREST, &amp; OTHER REVENUE</b>	<b>\$288</b>	<b>\$261</b>	<b>\$255</b>	<b>\$250</b>	<b>\$254</b>	<b>\$238</b>	<b>\$246</b>	<b>\$241</b>	<b>\$212</b>	<b>\$242</b>	<b>\$260</b>	<b>\$274</b>	<b>\$3,022</b>

## **2020 SCA BUDGET PRO FORMA FINANCIAL STATEMENTS**

### **STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**

The Pro Forma Statements of Revenues, Expenses and Changes in Net Position is a projected summary of the results of operations prepared on a FERC basis for SCA in 2020. The Statements of Revenues, Expenses and Changes in Net Position incorporates revenues as shown on the Revenue Detail, expenses as shown on the Budget Summary, and non-cash expenses such as depreciation and amortization.

**DEPRECIATION** represents the pro rata expensing of the capital cost of the Project. Estimated service life is based on the remaining life of the Plant at the time a capital project is placed in service, the original life of the Plant being 30 years.

**AMORTIZATION OF REGULATORY ASSET – DEBT ISSUANCE** represents the amortization of debt issuance costs related to the issuance of the Bonds. In 2013, SCA adopted GASB No. 65, which changed how debt issuance costs were recorded. SCA implemented GASB No. 62 which allowed SCA to continue to amortize these costs. This resulted in the amortization being moved into the Operating Expense section of the Statements of Revenues, Expenses and Changes in Net Position. Any debt issuance costs incurred after January 1, 2020, will be expensed in the period incurred.

**AMORTIZATION OF BOND PREMIUM / DISCOUNT** represents amortization of any premiums or discounts related to the issuance of the Bonds. These costs are amortized to Interest Expense over the term of the Bonds.

**DEFEASANCE OF BONDS** was completed in 2019.

SCA is projecting a net loss of (\$4.627) million, a decrease of \$6.016 million over 2019. The decrease is primarily due to lower operating margin partly offset by interest expense removed due to debt defeasement.

**2020 SCA BUDGET**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**  
For the Period January 1, 2020 to December 31, 2020

Dollars in Thousands

	2019 BUDGET	2020 BUDGET
<b>OPERATING REVENUES:</b>		
Sale of Electricity	\$41,235	\$31,170
Sale of Steam	2,864	3,022
<b>TOTAL OPERATING REVENUES</b>	<b>44,099</b>	<b>34,192</b>
<b>OPERATING EXPENSES</b>		
Fuel	25,558	21,002
Production	6,863	8,309
Administrative & General	1,578	1,647
<b>Total Operations</b>	<b>33,999</b>	<b>30,957</b>
Depreciation	7,860	7,861
Amortization of Regulatory Asset-Debt Issuance	40	0
<b>TOTAL OPERATING EXPENSES</b>	<b>41,898</b>	<b>38,819</b>
<b>NET OPERATING INCOME</b>	<b>2,201</b>	<b>(4,627)</b>
<b>INTEREST EXPENSE</b>		
Interest on Long-Term Debt	830	0
Amortization of Premium/Discount Costs	(18)	0
<b>Net Interest Expense</b>	<b>812</b>	<b>0</b>
<b>CHANGE IN NET POSITION</b>	<b>\$1,389</b>	<b>(\$4,627)</b>





# DRAFT

RESOLUTION NO. \_\_\_\_\_

**BE IT RESOLVED BY THE COMMISSIONERS**  
**OF THE**  
**SACRAMENTO COGENERATION AUTHORITY:**

**Section 1.** This resolution may be referred to as the 2020 SCA budget resolution.

**Section 2.** There is hereby appropriated from the Revenue Fund, Operating Fund, Debt Service Fund, and other funds as appropriate, sufficient monies for the payment of demands against the Authority which relate to obligations incurred for the purposes and within the amount specified for such purposes in the following projection of the Authority's programs for the period January 1, 2020 through December 31, 2020.

Operation and Maintenance	\$ 29,310,883
Administrative & General	\$ 1,646,555

There shall be deemed added to the O&M and Capital line item a +20% increase with no limit to a decrease in the Operations and Maintenance Expense line item, plus an additional \$2 million applicable to the overall budget.

**Section 3.** Demands against the Authority may be paid without the prior specific approval of this Commission, if they relate to obligations incurred for the purpose and within the amounts specified in Section 2, provided such demands are approved by the General Manager of the Authority, or his designee. It is the purpose and intent of this paragraph to delegate to the General Manager, or his designee, authority to make purchases, to negotiate and execute contracts, and expend funds in

any manner necessary or appropriate to the administration of the business affairs of the Authority, within the amounts and for the purposes set forth above, subject to duly adopted delegations of authority.