



**CVFA**

*Central Valley Financing Authority*

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

*CVFA Cogeneration Project*

October 15, 2020  
CVFA 20-007

**TO: CVFA COMMISSION**

**SUBJECT: 2021 PROPOSED CVFA BUDGET**

We are pleased to present the proposed 2021 Operating Budget for the Central Valley Financing Authority (CVFA). This budget represents the anticipated expenses for the twenty-fifth year of operation for the 99.9 MW CVFA Carson Cogeneration Plant.

This generation facility has operated successfully since commercial operation began on October 11, 1995. SMUD will be purchasing all of the electrical energy generated, and the Sacramento Regional County Sanitation District and the Glacier Valley Ice Company will be purchasing steam produced by the Plant. Since January 2012, CVFA has been cleaning digester gas to pipeline quality and selling it to SMUD for use in the Cosumnes Power Plant (CPP).

The Operating Budget for the Authority for the period of January 1, 2021 to December 31, 2021 totals \$12,865,220 for Operations & Maintenance, \$1,467,911 for Administrative and General, and \$1,142,255 for Capital Expenditures. Should you have any questions regarding this proposed 2021 Operating Budget, please don't hesitate to contact me at (916) 732-6584.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ross Gould". The signature is fluid and cursive, with a large initial "R" and "G".

Ross Gould  
Director, Power Generation

## **2021 CVFA BUDGET**

The Central Valley Financing Authority (CVFA) is a Joint Powers Agency (JPA) formed in 1992 by Sacramento Municipal Utility District (SMUD) and the Sacramento Regional County Sanitation District (SRCSD) for the purpose of acquiring, constructing, financing and operating the Carson Cogeneration Project (Project). CVFA sold Cogeneration Project Revenue Bonds (Bonds) in July 1993 and the proceeds have been used to construct the Project. Construction and start-up testing were completed in mid-1995 and commercial operation began in October 1995. In August 2009, CVFA sold Cogeneration Project Refunding Bonds (Refunding Bonds), completely retiring all previously issued bonds and restructuring the Power Purchase Agreement (PPA) between CVFA and SMUD. In September 2019, CVFA completely retired all of the outstanding Refunding Bonds and again restructured the PPA between CVFA and SMUD.

The Project is a cogeneration plant located adjacent to the SRCSD facility in southern Sacramento County. The plant consists of one clean-burning gas-fired combined cycle gas turbine generator unit, one steam turbine generator unit, and one simple cycle gas turbine for a combined capacity of 107.5 MW. Besides electricity, the Project generates steam that is sold to SRCSD and an adjacent ice producing facility owned by the Glacier Valley Ice Company (Glacier Ice). The units are permitted to burn both digester gas from the SRCSD facility, which was previously flared, and natural gas. SMUD has designed and built transmission and telecommunications facilities to integrate the Project into SMUD's electrical system. Since January 2012, CVFA has been cleaning the digester gas it receives from SRCSD to pipeline quality and selling it to SMUD for use in the Cosumnes Power Plant, where it can be used more efficiently.

This 2021 CVFA budget covers the expected financial operations of CVFA and the Project from January 1, 2021 through December 31, 2021. 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 CVFA in 2021 in the course of running the Project and conducting the business of CVFA. The second part of the budget lists capital and other expenditures proposed for 2021. Also included in this document is a pro forma financial statement. This statement incorporates CVFA revenues and non-cash expenses such as depreciation to show the complete financial results of operations for the year.

The operation of CVFA 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 SRCSD. CVFA has no employees; SMUD will provide technical and administrative services for CVFA pursuant to the PPA. The CVFA Board consists of the SMUD Board plus one non-voting member appointed by SRCSD.

**POWER PURCHASE AGREEMENT (PPA)** between SMUD and CVFA. CVFA has agreed to sell to SMUD and SMUD has agreed to purchase the energy and capacity from the Project. SMUD will pay CVFA for its costs whether or not the Project is operating.

This agreement will be in effect until terminated by SMUD. This agreement covers the terms of how the Project will be operated (SMUD will dispatch) and the calculation of payments from SMUD to CVFA for operation of the Project.

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

**OPERATIONS & MAINTENANCE AGREEMENT (O&M AGREEMENT)** between CVFA and EthosEnergy Power Plant Services (Ethos), the plant operator. CVFA 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. On August 21, 2020, CVFA exercised a one-sided renewal clause extending the agreement for a second five year term.

**COMMODITY AGREEMENT** between CVFA and SRCSD. This agreement covers the terms and conditions of the sale of digester gas from the SRCSD to CVFA and the sale of steam from CVFA to SRCSD.

**THERMAL ENERGY SALES AND SUBLEASE AGREEMENT** between CVFA and Glacier Ice. This agreement covers the terms and conditions of energy sales from CVFA to Glacier Ice. In September 2016, the second amendment to this agreement was signed wherein CVFA replaced the steam driven refrigeration equipment with electrically driven motors. The electrification project was completed in February 2017.

**GROUND LEASE AGREEMENT** between CVFA and SRCSD covers the terms of CVFA's ground lease for the property on which the Project and Glacier Ice are located.

**CENTRAL VALLEY FINANCING AUTHORITY  
2021  
BUDGET SUMMARY**

	2020 BUDGET	2021 BUDGET	NET CHANGE PERCENT
<b>GENERATION (MWh)</b>	268,661	181,430	-32%
<b>FUEL</b>			
Natural Gas Expenses	\$9,206,796	\$5,666,549	-38%
Natural Gas Commodity (\$ /MMBtu)	\$3.09	\$2.31	-25%
Digester Gas for Generation	\$0	\$0	
Digester Gas for Resale	\$1,501,881	\$1,513,272	1%
<b>TOTAL FUEL EXPENSES</b>	<b>\$10,708,677</b>	<b>\$7,179,821</b>	<b>-33%</b>
<b>PLANT OPERATION &amp; MAINTENANCE</b>			
Station Service Energy/Utilities	\$736,508	\$758,603	3%
Operator Fees	\$4,530,952	\$4,532,384	0%
Lease Engine Program	\$60,356	\$0	-100%
Site Lease/Mitigation Fees	\$203,357	\$209,413	3%
JPA Administrative & Other Expenses	\$15,000	\$15,000	0%
Overhaul Expenses	\$275,000	\$170,000	-38%
<b>TOTAL PLANT OPERATION &amp; MAINTENANCE</b>	<b>\$5,821,173</b>	<b>\$5,685,400</b>	<b>-2%</b>
<b>TOTAL O&amp;M COSTS</b>	<b>\$16,529,850</b>	<b>\$12,865,220</b>	<b>-22%</b>
<b>ADMINISTRATIVE &amp; GENERAL</b>			
SMUD Labor	\$444,480	\$447,815	1%
Outside Services	\$74,170	\$79,162	7%
Insurance	\$1,032,943	\$940,934	-9%
<b>TOTAL ADMINISTRATIVE &amp; GENERAL</b>	<b>\$1,551,593</b>	<b>\$1,467,911</b>	<b>-5%</b>
<b>INTEREST EXPENSE</b>			
Interest on CVFA Bonds	\$0	\$0	
<b>DEBT SERVICE PRINCIPAL REPAYMENT</b>			
CVFA Bond Principal Repayment	\$0	\$0	
<b>PLANNED CAPITAL EXPENSES</b>	<b>\$949,081</b>	<b>\$1,142,255</b>	<b>20%</b>
<b>TOTAL PRINCIPAL, INTEREST &amp; CAPITAL EXPENDITURES</b>	<b>\$949,081</b>	<b>\$1,142,255</b>	<b>20%</b>

## **2021 CVFA BUDGET ASSUMPTIONS**

The 2021 CVFA Budget is based on the following assumptions:

**PLANNED GENERATION** from the Project during the January 1, 2021 to December 31, 2021 budget period, as taken from SMUD's 2021 Resource Operating Plan (ROP), dated October 2020, is 175,645 MWh for the combined cycle and 5,785 MWh for the Peaker, for a grand total of 181,430 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 8,464 Btu/KWh for the combined cycle and 10,954 Btu/KWh for the peaker.

**DIGESTER GAS** usage is based on the requirement that CVFA purchase no less than 90% of the digester gas made available by SRCSD. CVFA cleans the vast majority of this digester gas to pipeline quality standards and sells it to SMUD for use in another facility.

**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 2021, plus 3.2% fuel use. The fixed component represents CVFA's pro rata share of fixed capacity costs on the Alberta Gas Company/NOVA Corporation of Alberta/Pacifica 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.

**DIGESTER GAS PRICE** is based on the formula in the Commodity Agreement, which is based on the electricity price paid by SRCSD. The commodity price (including SRCSD's cleanup fee) is estimated at \$2.86/MMBtu for 2021. CVFA plans to spend an additional \$0.07/MMBtu to bring the digester gas to pipeline quality before selling it to SMUD.

**FIXED OPERATING FEE** to be paid from CVFA 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 57,400 kW, based on NDC tests performed during acceptance testing in 1995. NDC for the Peaking Plant is assumed to be 42,500 kW.

**REIMBURSABLE OPERATING COSTS** to be paid from CVFA to Ethos is based on estimated variable plant operating costs, excluding fuel, to be incurred by Ethos in 2021.

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

## 2021 CVFA 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)	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
Generation (MWh)	35,286	15,567	1,446	8,731	948	1,170	9,101	38,670	21,861	3,777	4,401	34,686	175,645
Natural Gas (1000's of MMBtu)	288	128	13	74	9	10	76	321	179	31	36	283	1,450
Digester Gas (1000's of MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	-
Model Anticipated Average Heat Rate (Btu/kWH)	8,176	8,227	8,801	8,431	9,638	8,704	8,401	8,305	8,199	8,285	8,235	8,167	8,464
Budgeted Availability (IEEE)	97%	97%	68%	98%	97%	98%	97%	100%	98%	97%	100%	97%	95%
<b>Peaking Power Plant:</b>													
Capacity (Megawatts Net)	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
Generation (MWh)	489	496	393	386	384	336	426	774	814	436	346	505	5,785
Natural Gas (1000's of MMBtu)	5	5	4	4	4	4	5	8	9	5	4	5	63
Model Anticipated Average Heat Rate (Btu/kWH)	10,707	10,691	11,130	11,173	11,189	11,509	10,912	10,559	10,578	10,927	11,427	10,642	10,954
Budgeted Availability (IEEE)	97%	97%	68%	98%	97%	98%	97%	100%	98%	97%	100%	97%	95%

## **2021 CVFA BUDGET LINE ITEM DETAIL**

The following schedule shows a monthly breakdown of the line items within the CVFA 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 plants) to PG&E's interstate gas pipeline.

Under the GSA, SMUD will handle the actual procurement and transportation arrangements for CVFA. The assumed price 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.

Digester gas is produced at SRCSD's Wastewater Treatment Plant adjacent to the Project. This gas can either be cleaned to pipeline quality and sold to SMUD or utilized at CVFA as a supplemental fuel for the Project. The quantity of digester gas produced by SRCSD's Wastewater Treatment Plant and available for use by the Project is based on engineering estimates.



**2021 CVFA 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%	35,286	15,567	1,446	8,731	948	1,170	9,101	38,670	21,861	3,777	4,401	34,686	175,645
Average Heat Rate Btu/kWh	8,176	8,227	8,801	8,431	9,638	8,704	8,401	8,305	8,199	8,285	8,235	8,167	8,464
Comb Cycle Fuel Usage (1000's of MMBtu)	288	128	13	74	9	10	76	321	179	31	36	283	1,450
Comb Cycle Digester Gas Usage (1000's of MMBtu)	-	-	-	-	-	-	-	-	-	-	-	-	-
Auxiliary Boiler Fuel Usage (1000's of MMBtu)	1	11	16	9	13	12	9	9	3	2	1	5	91
<b>Peaker Unit:</b>													
Peaker Generation MWh Adjusted by 100%	489	496	393	386	384	336	426	774	814	436	346	505	5,785
Average Heat Rate Btu/kWh	10,707	10,691	11,130	11,173	11,189	11,509	10,912	10,559	10,578	10,927	11,427	10,642	10,954
Peaker Natural Gas Usage (1000's of MMBtu)	5	5	4	4	4	4	5	8	9	5	4	5	63
<b>Total Digester Gas Usage (1000's of MMBtu)</b>													
Digester Gas for Resale	44	40	44	42	44	42	44	44	42	44	42	44	516
Digester Gas Commodity \$/MMBtu	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86	\$2.86
Digester Gas Cleanup Cost \$/MMBtu	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07
Digester Gas Cleanup - depreciation \$/MMBtu	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53	\$0.53
Digester Gas Costs for Generation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Digester Gas Costs for Resale, excluding depreciation	\$129	\$116	\$129	\$124	\$129	\$124	\$129	\$129	\$124	\$129	\$124	\$129	\$1,513
<b>Total Natural Gas Usage (thousands of MMBtu)</b>													
Natural Gas Price Variable Component (\$/MMBtu)	\$3.07	\$2.96	\$2.58	\$0.49	\$1.05	\$1.70	\$2.32	\$2.80	\$2.46	\$2.38	\$2.86	\$3.09	\$2.31
Auxiliary Boiler Fuel Expenses	\$8	\$28	\$41	\$4	\$14	\$23	\$25	\$1	\$15	\$27	\$37	\$7	\$227
Natural Gas Variable Expenses (Commodity)	\$910	\$423	\$85	\$42	\$28	\$47	\$212	\$922	\$477	\$113	\$152	\$899	\$4,309
<b>Demand, Storage, &amp; Procurement</b>													
	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$556
<b>Amortization of Deferred Capacity</b>													
	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$31
<b>SMUD Fixed Gas Expenses:</b>													
SMUD Pipeline Depreciation	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$59
SMUD Pipeline Interest Charges	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$45
SMUD Pipeline O&M Charges	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$31	\$374
<b>TOTAL SMUD Fixed Gas Expenses</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$40</b>	<b>\$478</b>
<b>PG&amp;E Line 300/401:</b>													
Line 300/401 Investment Amortization	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$12	\$141
Line 300/401 Interest Charges	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$7	\$84
Line 300/401 Property Taxes	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$31
Line 300/401 O&M Charges	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$37
<b>TOTAL PG&amp;E Line 300/401</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$24</b>	<b>\$293</b>
Rosa Interest	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rosa Depletion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rosa Unit total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Natural Gas Expenses</b>													
	\$1,023	\$536	\$198	\$156	\$141	\$160	\$326	\$1,035	\$590	\$226	\$265	\$1,012	\$5,667
<b>SubTotal Fixed Fuel Costs</b>													
	\$113	\$113	\$113	\$113	\$113	\$113	\$113	\$113	\$113	\$113	\$113	\$113	\$1,358
<b>SubTotal Variable Fuel Costs</b>													
	\$1,038	\$539	\$214	\$167	\$157	\$171	\$341	\$1,050	\$601	\$241	\$276	\$1,027	\$5,822
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>\$1,152</b>	<b>\$652</b>	<b>\$327</b>	<b>\$280</b>	<b>\$270</b>	<b>\$284</b>	<b>\$454</b>	<b>\$1,163</b>	<b>\$714</b>	<b>\$355</b>	<b>\$389</b>	<b>\$1,140</b>	<b>\$7,180</b>

## **2021 CVFA BUDGET LINE ITEM DETAIL**

### **PLANT OPERATIONS & MAINTENANCE**

**OPERATOR FEES:** The budget for operator fees and plant operating expenses represent fees paid to Ethos, under the terms of the O&M Agreement, plus actual variable plant operating expenses incurred by Ethos and reimbursed from CVFA 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 performance 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 maintaining a peaking plant successful call-up ratio based on how successfully the unit starts and generates electricity when needed. The 2021 budget assumes that Ethos will successfully earn these bonuses.

**SITE LEASE:** This line item represents the 2021 cost of site lease payments from CVFA to SRCSD for plant site ground lease costs under the Ground Lease Agreement.

**STATION SERVICE ELECTRICITY:** CVFA 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 insure that power is available to run plant systems during planned or unplanned outages.

**2021 CVFA BUDGET  
LINE ITEM DETAIL**

**CVFA OPERATING AND ADMINISTRATIVE COSTS**

**OPERATING COSTS:** Under the terms of the O&M Agreement and the PPA, various tests (heat rate, NDC, etc.) of Project operations may be required by SMUD or CVFA 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.

**2021 CVFA 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)	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40	57.40
Net Dependable Capacity PP (MW)	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50	42.50
Net Dependable Capacity MW	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90
Total Generation MWh	35,775	16,063	1,839	9,117	1,332	1,506	9,527	39,445	22,675	4,213	4,747	35,191	181,430
<b>OPERATOR FEES:</b>													
Fixed Fee Expenses	\$156	\$141	\$156	\$151	\$156	\$151	\$156	\$156	\$151	\$156	\$151	\$156	\$1,839
Availability Bonus - Combined Cycle	\$24	\$24	\$0	\$0	\$0	\$47	\$47	\$47	\$47	\$24	\$0	\$24	\$283
Availability Bonus - Peaker	\$13	\$13	\$6	\$6	\$6	\$13	\$13	\$13	\$13	\$13	\$6	\$13	\$129
Reimbursable Operator Expenses	\$203	\$157	\$229	\$426	\$140	\$157	\$137	\$157	\$166	\$157	\$216	\$137	\$2,281
<b>Operator Fees</b>	<b>\$396</b>	<b>\$334</b>	<b>\$392</b>	<b>\$584</b>	<b>\$302</b>	<b>\$368</b>	<b>\$354</b>	<b>\$373</b>	<b>\$377</b>	<b>\$349</b>	<b>\$374</b>	<b>\$330</b>	<b>\$4,532</b>
<b>Overhaul Expenses</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>	<b>\$70</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$170</b>
<b>Site Lease</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$208</b>
<b>Swainson's Hawk Mitigation</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2</b>
<b>Lease Engine Program</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>SMAQMD Title V Permit</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>\$15</b>	<b>\$0</b>	<b>\$15</b>
<b>Annual CEC Energy Facility Compliance Fees</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>Station Service Electricity and Utilities</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$759</b>
<b>Station Service Electricity</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$63</b>	<b>\$759</b>
<b>Sewer Fees</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>TOTAL PLANT OPERATION &amp; MAINTENANCE</b>	<b>\$477</b>	<b>\$415</b>	<b>\$472</b>	<b>\$764</b>	<b>\$454</b>	<b>\$448</b>	<b>\$434</b>	<b>\$453</b>	<b>\$457</b>	<b>\$430</b>	<b>\$469</b>	<b>\$411</b>	<b>\$5,685</b>

## **2021 CVFA 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 CVFA 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 CVFA revenues.

**INSURANCE:** Under the terms of the Indenture, CVFA is required to maintain insurance as SMUD determines CVFA 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 CVFA.

**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, CVFA will retain the services of an Independent Engineer to review the CVFA Budget and provide independent oversight of CVFA and Project operation.

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

**2021 CVFA BUDGET DETAIL  
ADMINISTRATIVE & GENERAL**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>INSURANCE:</b>	\$74	\$74	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$941
<b>SMUD Administrative &amp; General:</b>													
Independent Engineer	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$4	\$50
Independent Auditor	\$0	\$14	\$3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3	\$20
Outside Services (travel, vessel insp, etc.)	\$0	\$0	\$6	\$0	\$0	\$0	\$0	\$0	\$2	\$0	\$0	\$0	\$9
<b>SMUD Administrative &amp; General TOTAL:</b>	\$4	\$18	\$14	\$4	\$4	\$4	\$4	\$4	\$6	\$4	\$4	\$7	\$79
<b>SMUD Labor</b>	\$36	\$33	\$38	\$39	\$35	\$41	\$42	\$35	\$39	\$34	\$36	\$40	\$448
<b>TOTAL ADMINISTRATIVE &amp; GENERAL</b>	<b>\$115</b>	<b>\$125</b>	<b>\$130</b>	<b>\$123</b>	<b>\$119</b>	<b>\$125</b>	<b>\$125</b>	<b>\$118</b>	<b>\$124</b>	<b>\$118</b>	<b>\$120</b>	<b>\$127</b>	<b>\$1,468</b>

**2021 CVFA BUDGET  
LINE ITEM DETAIL**

**CAPITAL EXPENDITURES**

Please see attached schedule.

## 2021 CVFA BUDGET DETAIL CAPITAL EXPENDITURES

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Capital Expenses</b>													
<b>Plant Betterments (Released Fund):</b>													
CVFA Steam Turbine Cntrl Upgr		\$175		\$325									\$500
DCS Ctrl Sys Upgr-HMI Cont	\$2	\$327	\$212	\$52	\$50								\$642
<b>Plant Betterments:</b>	<b>\$2</b>	<b>\$502</b>	<b>\$212</b>	<b>\$377</b>	<b>\$50</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,142</b>
<b>TOTAL CAPITAL EXPENSES</b>	<b>\$2</b>	<b>\$502</b>	<b>\$212</b>	<b>\$377</b>	<b>\$50</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,142</b>
<b>TOTAL O&amp;M COSTS (Including Capital items)</b>	<b>\$1,745</b>	<b>\$1,693</b>	<b>\$1,141</b>	<b>\$1,544</b>	<b>\$893</b>	<b>\$857</b>	<b>\$1,014</b>	<b>\$1,735</b>	<b>\$1,295</b>	<b>\$902</b>	<b>\$979</b>	<b>\$1,678</b>	<b>\$15,475</b>



## **2021 CVFA BUDGET**

### **PRO FORMA FINANCIAL SCHEDULES**

CVFA 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 CVFA during the 2021 budget period based on the 2021 budget assumptions and expense and capital budgets.

#### **REVENUE DETAIL**

The following schedule details expected CVFA Revenue during the 2021 budget period.

**ELECTRIC REVENUE:** Under the terms of the PPA, SMUD is obligated to make monthly Financial and Operating payments to CVFA for capacity and energy provided by CVFA. 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 CVFA an amount equal to the sum of all costs and expenses payable by CVFA pursuant to the Lease and Property Agreement, the O&M Agreement, GSA, the Commodity Agreement, 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 \$100,000 per month to cover other CVFA obligations.

**STEAM / ENERGY SALES REVENUE:** CVFA will sell process steam generated by the Project to SRCSD under the terms of the Commodity Agreement. Estimates derived from historical steam loads and steam tariff rates from these agreements have been used in the 2021 Budget. CVFA will sell energy (mechanical/steam) to Glacier Ice under the terms of the Second Amendment to the Thermal Energy Sales and Sublease Agreement between CVFA and Glacier Ice.

**DIGESTER GAS SALES REVENUE:** Since January 2012, CVFA has been cleaning the vast majority of all digester gas received from SRCSD to pipeline quality standards and reselling this gas to SMUD. SMUD has agreed to purchase the gas from CVFA for a fee which is sufficient to cover all purchase and cleaning expenses incurred.

**INTEREST INCOME:** CVFA 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.

**2021 CVFA BUDGET DETAIL  
ELECTRIC REVENUE DETAIL**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Operating Payment</b>													
Fixed Payment	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$1,200
Site Lease	\$208												\$208
O&M Agreement	\$396	\$334	\$392	\$584	\$302	\$368	\$354	\$373	\$377	\$349	\$374	\$330	\$4,532
Natural Gas Interconnection and Supply Agreement	\$1,023	\$536	\$198	\$156	\$141	\$160	\$326	\$1,035	\$590	\$226	\$265	\$1,012	\$5,667
Commodity Agreement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Insurance Costs	\$0	\$0	\$941	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$941
Overhaul Costs	\$0	\$0	\$0	\$100	\$70	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170
Capital	\$2	\$502	\$212	\$377	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,142
Other Operating Costs										\$0			\$0
<b>TOTAL OPERATING REVENUE</b>	<b>\$1,729</b>	<b>\$1,472</b>	<b>\$1,843</b>	<b>\$1,316</b>	<b>\$664</b>	<b>\$628</b>	<b>\$779</b>	<b>\$1,508</b>	<b>\$1,067</b>	<b>\$675</b>	<b>\$739</b>	<b>\$1,442</b>	<b>\$13,860</b>
<b>AGGREGATE PAYMENT</b>	<b>\$1,729</b>	<b>\$1,472</b>	<b>\$1,843</b>	<b>\$1,316</b>	<b>\$664</b>	<b>\$628</b>	<b>\$779</b>	<b>\$1,508</b>	<b>\$1,067</b>	<b>\$675</b>	<b>\$739</b>	<b>\$1,442</b>	<b>\$13,860</b>

**2021 CVFA BUDGET DETAIL  
ENERGY SALES REVENUE ON STEAM & OTHER REVENUE DETAIL**

Dollars in Thousands	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>ENERGY SALES REVENUE ON STEAM:</b>													
<b>GLACIER VALLEY ICE COMPANY:</b>													
KWh Sales per Load Fcst	437,934	437,934	437,934	437,934	437,934	437,934	437,934	437,934	437,934	437,934	437,934	437,934	\$5,255,208
\$ per KWh	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
Glacier Energy Sales Revenue on Steam	\$8.61	\$8.61	\$8.61	\$8.61	\$8.61	\$8.61	\$8.61	\$9	\$9	\$9	\$9	\$9	\$103.3
Glacier Energy Fixed Fee	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.15	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$1.8
<b>SAC REG CTY SAN DIS (SRCSD):</b>													
SRCSD Steam Delivery (MMBtu)	22,511	15,616	12,283	16,278	16,578	15,679	16,234	16,233	15,328	13,556	16,214	21,598	198,108
Steam Price (\$/MMBtu)	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63	\$2.63
SRCSD Steam Sales Revenue	\$59	\$41	\$32	\$43	\$44	\$41	\$43	\$43	\$40	\$36	\$43	\$57	\$521
<b>TOTAL STEAM SALES (incl FIXED)</b>	<b>\$68</b>	<b>\$50</b>	<b>\$41</b>	<b>\$52</b>	<b>\$52</b>	<b>\$50</b>	<b>\$51</b>	<b>\$51</b>	<b>\$49</b>	<b>\$44</b>	<b>\$51</b>	<b>\$66</b>	<b>\$626</b>
<b>INTEREST INCOME &amp; OTHER</b>													
<b>Interest Income</b>													
Interest Income (Thousands \$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Digester Gas Sales Revenue	\$151	\$139	\$151	\$147	\$151	\$147	\$151	\$151	\$147	\$151	\$147	\$151	\$1,787
Glacier Valley Site Lease	\$4.6	\$4.6	\$4.6	\$4.6	\$4.6	\$4.6	\$4.6	\$4.6	\$5	\$5	\$5	\$5	\$55
<b>Total Interest &amp; Other Income</b>	<b>\$156</b>	<b>\$144</b>	<b>\$156</b>	<b>\$152</b>	<b>\$156</b>	<b>\$152</b>	<b>\$156</b>	<b>\$156</b>	<b>\$152</b>	<b>\$156</b>	<b>\$152</b>	<b>\$156</b>	<b>\$1,842</b>
<b>TOTAL REVENUE</b>	<b>\$1,953</b>	<b>\$1,665</b>	<b>\$2,040</b>	<b>\$1,520</b>	<b>\$872</b>	<b>\$829</b>	<b>\$987</b>	<b>\$1,715</b>	<b>\$1,268</b>	<b>\$876</b>	<b>\$942</b>	<b>\$1,663</b>	<b>\$16,329</b>

# **2021 CVFA 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 CVFA in 2021. 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 AND ACCRETION** represents the pro rata expensing of the capital cost of the Project and the amortization of an Asset Retirement Obligation related to the Project's facilities. 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, CVFA adopted GASB No. 65, which changed how debt issuance costs were recorded. CVFA implemented GASB No. 62 which allowed CVFA 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, 2021, 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.

CVFA is projecting a net loss of (\$5.190) million, an increase of \$0.471 million over 2020. The increase is primarily due to lower depreciation/amortization and a year-over-year increase of \$0.193 million passthrough capital cost in revenue.

**2021 CVFA BUDGET**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**  
For the Period January 1, 2021 to December 31, 2021

Dollars in Thousands

	2020 BUDGET	2021 BUDGET
<b>OPERATING REVENUES:</b>		
Sale of Electricity	\$17,457	\$13,860
Sale of Digester Gas	1,776	1,787
Sale of Steam / Energy	685	681
<b>TOTAL OPERATING REVENUES</b>	<b>19,918</b>	<b>16,329</b>
 <b>OPERATING EXPENSES</b>		
Fuel	10,709	7,180
Production	5,821	5,685
Administrative & General	1,552	1,468
<b>Total Operations</b>	<b>18,081</b>	<b>14,333</b>
Depreciation and Amortization	7,498	7,186
Amortization of Regulatory Asset-Debt Issuance	0	0
<b>TOTAL OPERATING EXPENSES</b>	<b>25,579</b>	<b>21,519</b>
 <b>NET OPERATING INCOME</b>	<b>(5,661)</b>	<b>(5,190)</b>
 <b>CHANGE IN NET POSITION</b>	<b>(\$5,661)</b>	<b>(\$5,190)</b>

# DRAFT

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

**BE IT RESOLVED BY THE COMMISSIONERS**  
**OF THE**  
**CENTRAL VALLEY FINANCING AUTHORITY:**

**Section 1.** This resolution may be referred to as the 2021 CVFA budget resolution.

**Section 2.** There is hereby appropriated from the Revenue Fund, Operating 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, 2021 through December 31, 2021.

Operation and Maintenance	\$12,865,220
Administrative & General	\$ 1,467,911
Principal, Interest & Capital Expenditures	\$ 1,142,255

There shall be deemed added to the O&M and Capital line items 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.