

**SMUD ANNUAL DISCLOSURE
For the Year Ended 12/31/2022**

POWER SUPPLY RESOURCES

The following table sets forth information concerning SMUD’s power supply resources as of March 31, 2023. Capacity availability reflects rated or nameplate capacities at SMUD’s load center, as well as entitlement, firm allocations and contract amounts.

**POWER SUPPLY RESOURCES
(As of March 31, 2023)**

Source:	Capacity Available (MW)⁽¹⁾
Generating Facilities:	
Upper American River Project – Hydroelectric	685
Solano Wind Project – Wind ⁽²⁾	94
Hedge Battery ⁽²⁾	4
Sub-total:	783
Local Gas-Fired Plants:	
Cosumnes Power Plant.....	570
Carson Project.....	103
Procter & Gamble Project.....	166
McClellan	72
Campbell Soup Project.....	170
Sub-total:	1,081
Purchased Power:	
Western Area Power Administration (WAPA) ⁽³⁾ ⁽⁴⁾	351
Grady – Wind ⁽²⁾	34
Avangrid (Iberdrola) (PPM) – Wind ⁽²⁾	22
Feed-in-Tariff Photovoltaic – Solar ⁽²⁾	40
Rancho Seco Solar ⁽²⁾	53
NTUA Navajo Drew Solar ⁽²⁾	55
Great Valley – Solar ⁽²⁾	40
Wildflower Solar ⁽²⁾	8
Calpine Geysers – Geothermal.....	95
CalEnergy – Geothermal.....	26
Patua (Gradient/Vulcan) – Geothermal	12
Other Long-Term Contracts.....	18
ELCC Portfolio Adjustment ⁽²⁾	4
Sutter Calpine Thermal	258
Firm Contract Reserves ⁽⁴⁾	18
Committed Short-Term Purchases ⁽⁵⁾	275
Uncommitted Short-Term Purchases	8
Sub-total:	1,314
Total	3,178

⁽¹⁾ Available capacity is the net capacity available to serve SMUD’s system peak load during the month of July.

⁽²⁾ Capacity values for wind, solar, and storage projects shown are based on resource effective load carrying capability (ELCC) modeling.

⁽³⁾ Total includes SMUD’s Base Resource share and WAPA Customer allocations.

⁽⁴⁾ Assumes firm reserves of 5% are included.

⁽⁵⁾ Committed Short-Term Purchases are primarily purchased on a year-ahead to season-ahead basis from various sources.

Note: Totals may not add due to rounding.

**PROJECTED REQUIREMENTS AND RESOURCES TO MEET
LOAD REQUIREMENTS⁽¹⁾
ENERGY REQUIREMENTS AND RESOURCES (GWh)**

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Renewable Resources										
<u>District or Joint Powers Authority Owned:</u>										
UARP - Small Hydro ⁽²⁾	115	93	92	94	94	95	94	94	94	95
Solano Wind	585	738	895	902	902	904	902	902	902	904
Cosumnes-Shell Landfill Gas and Digester Gas ⁽³⁾	48	166	167	582	692	692	692	692	692	692
Total	748	996	1,154	1,578	1,688	1,691	1,688	1,688	1,688	1,691
<u>Purchases</u>										
Western (WAPA) – Small Hydro ⁽²⁾	13	15	15	15	15	15	15	15	15	15
Grady – Wind	933	900	897	897	897	900	897	897	897	900
Avangrid (Iberdrola) (PPM) - Wind	97	98	45	0	0	0	0	0	0	0
Patua (Gradient/Vulcan) – Geothermal	140	147	147	147	147	147	147	147	141	147
Geysers – Geothermal	876	878	876	876	876	878	876	876	876	878
Cal Energy – Geothermal	218	224	223	223	223	224	223	223	223	224
Great Valley SolarShares	167	170	171	171	169	169	169	166	166	167
Rancho Seco PV2	261	332	330	328	327	325	323	322	320	319
Rancho Seco PV	21	22	22	22	22	22	22	22	22	22
Feed-in-Tariff Photovoltaic – Solar	205	209	208	207	206	205	204	203	202	60
Navajo Drew (NTUA) Solar	299	301	298	297	285	276	273	264	271	237
Sloughhouse (Kings Country)	0	0	0	131	124	124	123	122	122	121
Wildflower Solar	31	31	31	31	33	32	33	31	32	32
CoyoteCreek (SVEC) Solar	0	0	0	519	505	502	500	497	495	492
Country Acres	0	0	0	710	706	703	699	696	692	689
Other Long-Term Contracts	145	150	140	29	8	8	6	6	6	6
Future Uncommitted Renewables	0	0	0	0	1,044	1,989	3,351	4,206	4,537	5,870
Total	3,404	3,477	3,403	4,602	5,587	6,521	7,861	8,693	9,018	10,179
Non-Renewable										
<u>District or Joint Powers Authority Owned:</u>										
UARP – Large Hydro ⁽²⁾	2,561	1,614	1,627	1,647	1,618	1,625	1,635	1,625	1,617	1,626
Cosumnes Power Plant	3,428	4,173	4,187	3,685	2,511	1,792	675	530	528	525
Procter & Gamble Project	786	859	809	831	123	43	2	3	5	4
Carson Project	423	480	435	401	3	0	1	3	4	4
Campbell Soup Project	776	929	926	0	0	0	0	0	0	0
McClellan	24	61	0	0	0	0	0	0	0	0
Total	7,998	8,116	7,984	6,565	4,256	3,460	2,313	2,160	2,155	2,160
<u>Purchases</u>										
Western (WAPA) – Large Hydro ⁽²⁾	410	482	485	485	485	485	485	485	485	485
Western (WAPA) Customers (Wheeling) ⁽²⁾	25	37	38	38	38	38	38	38	38	38
Calpine Sutter	1,733	1,695	1,660	1,585	0	0	0	0	0	0
Committed Purchases	0	0	0	0	0	0	0	0	0	0
Total	2,168	2,213	2,182	2,108	523	523	523	523	523	523
Total Resources	14,319	14,803	14,723	14,852	12,053	12,195	12,384	13,064	13,383	14,552
Uncommitted Purchases / (Sales)	(3,382)	(3,773)	(3,606)	(3,599)	(1,067)	(920)	(921)	(1,374)	(1,471)	(2,351)
Transmission Losses (COTP/CVP)	(3)	(11)	(11)	(9)	(82)	(102)	(129)	(146)	(152)	(179)
Total Projected Energy Requirements	10,933	11,018	11,106	11,244	10,903	11,174	11,335	11,544	11,759	12,021
Energy Efficiency (EE)	16	30	44	57	69	79	89	99	108	117
Customer PV	63	121	181	238	793	844	894	943	988	1,033
Expected Electric Vehicle (EV) Charging	(34)	(75)	(143)	(228)	(324)	(430)	(545)	(674)	(803)	(947)
Electric Building (EB)	(12)	(28)	(50)	(77)	(108)	(146)	(201)	(267)	(339)	(412)
Battery Storage (Utility)	0	0	0	0	(121)	(142)	(188)	(225)	(232)	(266)
Battery Storage (BTM)	(0)	(0)	(1)	(1)	(7)	(11)	(17)	(23)	(31)	(38)
Total Gross Energy Requirements before EE, PV and EV Charging	10,966	11,066	11,136	11,233	11,205	11,368	11,368	11,396	11,451	11,508

(1) Totals may not sum due to rounding.

(2) 2023 based on current precipitation levels as of March 31, 2023. All other years assume average precipitation.

(3) Includes a biomethane contract counted as renewable (see "POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply").

CAPACITY REQUIREMENTS AND RESOURCES⁽¹⁾⁽⁴⁾
NET CAPACITY – MEGAWATTS

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Load:										
Planned Peak	2,806	2,807	2,813	2,820	2,766	2,784	2,790	2,795	2,800	2,808
Transmission Losses	28	28	28	28	28	28	28	28	28	28
Dispatchable Demand Resource	(71)	(71)	(71)	(71)	(165)	(183)	(202)	(165)	(165)	(165)
Adjusted Peak	2,764	2,764	2,770	2,778	2,629	2,629	2,616	2,658	2,663	2,671
Reserve Margin	415	415	416	417	394	394	392	399	399	401
Adjusted Peak with Reserves	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072
Renewable Resources										
District or Joint Powers Authority Owned:										
UARP – Small Hydro	45	45	45	45	45	45	45	45	45	45
Solano Wind	94	97	158	202	204	194	197	198	201	201
Cosumnes – Shell Landfill Gas and Digester Gas ⁽²⁾	7	7	26	94	120	120	120	120	120	120
Total	146	148	229	341	369	359	362	363	365	366
Purchases										
Western (WAPA) – Small Hydro	10	10	9	9	9	9	9	9	9	9
Grady – Wind	34	33	33	32	32	33	33	33	29	29
Avangrid (Iberdrola) (PPM) - Wind	22	21	--	--	--	--	--	--	--	--
Patua (Gradient/Vulcan) – Geothermal	12	12	12	12	12	12	12	12	12	12
CalEnergy– Geothermal	26	26	26	26	26	26	26	26	26	26
Geysers – Geothermal	95	95	95	95	95	95	95	95	95	95
Great Value Solar Shares	40	35	33	14	14	15	16	15	14	13
Rancho Seco – PV1	3	3	3	0	1	2	1	1	1	1
Rancho Seco – PV2	50	66	61	16	23	26	19	17	14	11
Feed-in-Tariff Photovoltaic - Solar	40	35	31	7	10	13	6	8	5	5
Wildflower Solar	8	4	4	1	1	2	2	1	1	1
Navajo Solar	55	49	45	14	16	19	16	14	11	9
Sloughhouse Solar	--	--	--	14	15	17	15	14	13	12
CoyoteCreek Solar with Storage	--	--	--	154	147	152	147	145	143	141
CountryAcres with Storage	--	--	--	225	214	219	213	209	206	204
Stand-alone Storage	4	4	4	4	521	521	625	664	844	994
Future Uncommitted Renewables (Solar, Wind, Other)	--	--	--	--	90	209	215	289	333	346
Future Uncommitted Firm Renewables (Geothermal)	--	--	--	--	--	12	125	125	125	185
Other Long-Term Contracts	18	18	17	2	2	2	2	2	2	2
Total	414	410	371	625	1,228	1,383	1,576	1,678	1,881	2,093
Non-Renewable										
District or Joint Powers Authority Owned:										
UARP – Large Hydro	640	640	640	640	640	640	640	640	640	640
Cosumnes Power Plant	563	563	544	476	450	450	450	450	450	450
Carson Project	103	103	103	103	100	100	100	100	100	100
Procter & Gamble Project	166	166	166	166	166	166	166	150	150	150
McClellan	72	72	--	--	--	--	--	--	--	--
Campbell Soup Project	170	170	170	--	--	--	--	--	--	--
Total	1,714	1,714	1,623	1,385	1,356	1,356	1,356	1,340	1,340	1,340
Purchases										
Western (WAPA) – Large Hydro	323	309	304	304	304	304	304	304	304	304
Western (WAPA) Customers (wheeling)	19	18	18	18	18	18	18	18	18	18
Sutter Energy Center	258	258	258	258	--	--	--	--	--	--
Firm Contract Reserves ⁽³⁾	18	17	17	17	17	17	17	17	17	17
Committed Purchases	275	--	--	--	--	--	--	--	--	--
Total	892	602	596	596	338	338	338	338	338	338
Total Variable Renewal Diversity Benefit/(Risk)	4	107	124	263	164	131	162	178	199	215
Uncommitted Purchases / (Sales)	7	197	242	(16)	(432)	(544)	(787)	(840)	(1,062)	(1,281)
Total Resources	3,178	3,179	3,186	3,194	3,023	3,023	3,008	3,057	3,062	3,072

- (1) Based on information available as of March 31, 2023. Totals may not sum due to rounding. Capacity values for wind, solar, storage, and future variable renewable projects shown are based on resource effective load carrying capability (ELCC) modeling.
- (2) The Cosumnes Power Plant is a 495 MW plant that includes 100 MW capacity attributable to a biogas contract counted as renewable (see "POWER SUPPLY AND TRANSMISSION – Fuel Supply – Renewable Natural Gas Supply") and 395 MW capacity from natural gas.
- (3) SMUD assumes that for all firm system purchases, the suppliers will be planning 5% reserves.

AVERAGE CLASS RATES

	SMUD Rates (cents/kWh)⁽¹⁾	PG&E Rates (cents/kWh)⁽²⁾	Percent SMUD is Below PG&E⁽³⁾
Residential – Standard	17.96¢	36.27¢	50.5%
Residential – Low Income	12.53¢	23.11¢	45.7%
All Residential	17.10¢	30.50¢	44.0%
Small Commercial (Less than 20 kW)	17.39¢	34.55¢	49.7%
Small Commercial (21 to 299 kW)	16.07¢	33.90¢	52.6%
Medium Commercial (300 to 499 kW)	15.01¢	32.39¢	53.6%
Medium Commercial (500 to 999 kW)	14.08¢	28.00¢	49.7%
Large Commercial (Greater than 1,000 kW)	12.03¢	22.12¢	45.6%
Lighting – Traffic Signals	13.77¢	33.94¢	59.4%
Lighting – Street Lighting	15.64¢	46.15¢	66.1%
Agriculture	15.25¢	31.49¢	51.6%
System Average	15.65¢	29.83¢	47.6%

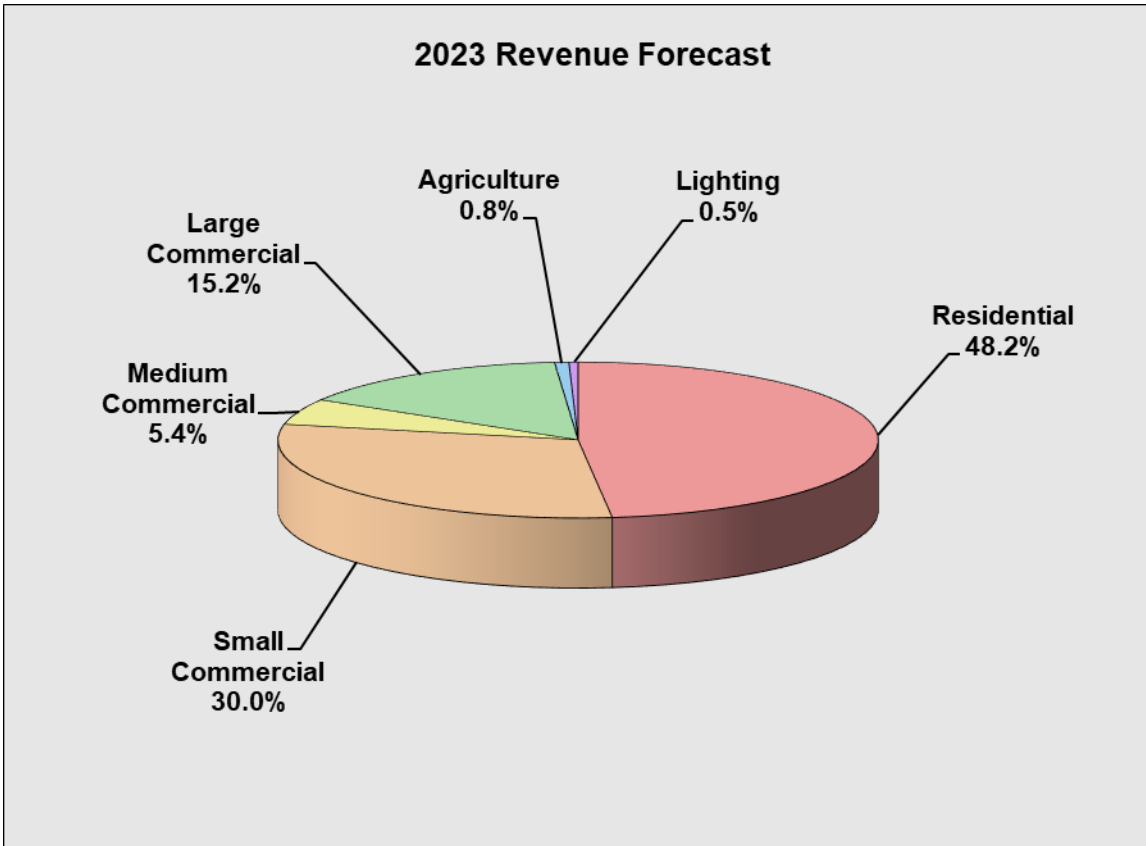
⁽¹⁾ Projected 2023 average prices for SMUD with rates effective January 1, 2023.

⁽²⁾ PG&E average prices in 2023 reflect rates effective March 1, 2023, per Advice Letter 6863-E- dated February 15, 2023.

⁽³⁾ The rates in the Average Class Rates table are calculated by dividing the total revenue of each class by the total usage of that class in kWh. The actual savings per customer will vary based on their electricity consumption.

ALLOCATION OF DISTRICT REVENUE BY CUSTOMER CLASS

The following chart sets forth the forecast percentage of SMUD revenues from billed sales associated with each customer class.



OPERATING DATA

Selected operating data of SMUD for the four years ended December 31, 2019 through 2022, and for the three months ended March 31, 2023 and March 31, 2022 are presented in the following table.

SMUD SELECTED OPERATING DATA CUSTOMERS, SALES, SOURCES OF ENERGY AND REVENUES

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021	2020	2019
Customers at End of Period:						
Residential	577,659	573,693	576,471	572,786	568,741	565,103
Commercial and industrial	69,503	69,531	69,512	69,426	68,628	68,203
Other	7,284	7,331	7,290	7,345	7,354	7,406
Total	<u>654,446</u>	<u>650,555</u>	<u>653,273</u>	<u>649,557</u>	<u>644,723</u>	<u>640,712</u>
MWh Sales:						
Residential	1,108,861	1,010,095	4,763,277	4,749,079	4,906,566	4,493,548
Commercial and industrial	1,234,611	1,313,519	5,805,052	5,649,474	5,453,120	5,616,920
Other	14,045	14,272	53,965	54,473	55,590	55,770
Total	<u>2,357,517</u>	<u>2,337,886</u>	<u>10,622,294</u>	<u>10,453,026</u>	<u>10,415,276</u>	<u>10,166,238</u>
Surplus power/out of area sales	989,530	551,317	2,493,651	2,774,907	2,259,991	1,878,205
Total	<u>3,347,047</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Sources of Energy Sold MWh:						
Generated by SMUD	1,683,465	1,297,158	4,368,126	6,776,244	6,414,380	7,143,944
Purchased or exchanged	1,773,658	1,679,188	9,162,576	6,884,003	6,691,279	5,324,217
Total	<u>3,457,123</u>	<u>2,976,346</u>	<u>13,530,702</u>	<u>13,660,247</u>	<u>13,105,659</u>	<u>12,468,161</u>
Less System losses and SMUD usage...	106,194	87,143	414,757	432,314	430,392	423,718
Total	<u>3,350,929</u>	<u>2,889,203</u>	<u>13,115,945</u>	<u>13,227,933</u>	<u>12,675,267</u>	<u>12,044,443</u>
Gross System peak demand (kW) ⁽¹⁾	1,549,000	1,526,000	3,263,000	3,019,000	3,057,000	2,927,000
Average kWh sales per residential customer ⁽²⁾	1,921	1,762	8,293	8,316	8,650	7,987
Average Revenue per kWh Sold:						
Residential ⁽²⁾ (cents)	14.52	14.34	16.73	16.20	15.27	14.90
Commercial & industrial ⁽²⁾ (cents).....	13.91	12.11	13.97	13.95	13.17	12.71

(1) Peak system MW values are measured at the four SMUD interconnection points and exclude SMUD's generation losses. Historical values include the impacts of dispatchable, non-dispatchable, and energy efficiency program capacity savings.

(2) The average kWh sales per residential customer and the average revenue per kWh sold are calculated based upon billed and unbilled sales.

Source: SMUD

SMUD UNCONSOLIDATED FINANCIAL DATA⁽¹⁾
(thousands of dollars)

	Three Months Ended March 31,		Year Ended December 31,			
	2023	2022	2022	2021 (Restated)	2020	2019
Summary of Income						
Operating Revenues ⁽²⁾	\$ 466,524	\$ 378,404	\$ 2,138,655	\$ 1,784,290	\$1,582,979	\$1,553,167
Operating Expenses	(489,270)	(376,017)	(2,102,849)	(1,464,069)	(1,397,845)	(1,412,199)
Operating Income (Loss)	(22,746)	2,387	35,806	320,221	185,134	140,968
Interest and Other Income (Expense) ..	32,593	10,777	124,704	108,788	63,014	(21,113)
Interest Expense	(18,608)	(19,294)	(74,702)	(81,692)	(80,699)	(66,185)
Change in Net Position	\$ (8,761)	\$ (6,130)	\$ 85,808	\$ 347,317	\$ 167,449	\$ 53,670
Selected Statement of Net Position Information						
Net Plant in Service	\$ 3,604,649	\$ 3,413,234	\$ 3,654,725	\$ 3,502,335	\$3,234,208	\$3,187,135
Construction Work in Progress	343,966	409,932	323,499	365,478	460,155	351,584
Electric Utility Plant – Net	\$ 3,948,615	\$ 3,823,166	\$ 3,978,224	\$ 3,867,813	\$3,694,363	\$3,538,719
Unrestricted Cash	\$ 554,360	\$ 536,534	\$ 591,410	\$ 569,001	\$ 662,155	\$ 451,800
Rate Stabilization Fund	\$ 151,118	\$ 193,608	\$ 156,016	\$ 188,992	\$ 168,726	\$ 143,669
Total Assets	\$ 6,297,170	\$ 6,032,532	\$ 6,421,666	\$ 6,096,865	\$5,826,449	\$5,429,137
Net Position	\$ 2,368,958	\$ 2,286,511	\$ 2,377,719	\$ 2,291,910	\$1,944,593	\$1,777,145
Long-Term Debt ⁽³⁾	\$ 2,228,327	\$ 2,378,960	\$ 2,236,824	\$ 2,387,686	\$2,523,921	\$2,166,389
Debt Service Coverage Ratios						
Parity Debt Service Coverage Ratio ..			2.04x	2.59x	2.25x	2.11x
Parity and Subordinate Debt Service Coverage Ratio			1.94x	2.47x	2.14x	2.06x

(1) The financial statements of SMUD comprise financial information of SMUD along with its component units, CVFA, SPA, SCA, SFA, NCGA and NCEA. This table includes only financial information of SMUD excluding its component units. Net operating revenues and expenses and Electric Utility Plant and Capitalization of CVFA, SPA, SCA, SFA, NCGA and NCEA are not included in this table, although amounts paid to or received from the Authorities by SMUD are included.

(2) Operating Revenues reflect net transfers to (from) the Rate Stabilization Fund for each full year as follows:

2023 (\$4.9) million through March 31, 2023
2022 (\$33.0) million
2021 \$20.3 million
2020 \$25.1 million
2019 \$47.0 million

Transfers to the Rate Stabilization Fund reduce operating revenues in the year transferred; transfers from the Rate Stabilization Fund increase operating revenues. Transfers from the HGA balancing account in the Rate Stabilization Fund are automatic based on the amount of precipitation received. See "RATES AND CUSTOMER BASE – Rates and Charges" above.

(3) Long-Term Debt includes Long-Term Debt due within one year and unamortized premiums.

DEBT SERVICE COVERAGE RATIOS

Year Ended December 31,

	2022	2021	2020	2019	2018
Parity Debt Service Coverage Ratio.....	2.04x	2.59x	2.25x	2.11x	2.52x
Fixed Charge Ratio.....	2.10x	2.55x	2.17x	2.02x	2.49x

Note: Previously shown figures have been updated to match current Accounting methodology.

METHOD OF COMPUTATION OF DEBT SERVICE RATIOS For the Year Ended 12/31/2021

	Debt Service Coverage Ratio (Parity Bond Basis)	Fixed Charge Basis
Operating Revenues ⁽¹⁾	\$ 2,138,655	\$ 2,138,655
Interest and Other Income	80,034	80,034
Adjustments:		
Build America Bonds rebate	9,253	-
Net receipts on Series K swap	2,446	-
CIAC (Cash Proceeds Only)	17,626	17,626
Grant Revenue	367	367
Revenue From Ineffective Gas Swaps	32,343	-
SB-1 Revenue Recognition	(40)	(40)
	2,280,684	2,236,642
Operating Expenses		
Operations & Maintenance (less Rosa accretion and PP&L amortization)	1,847,594	1,787,549
Non-Cash Operating Expense Adjustment	300	300
GASB 87 Reversal	26,000	26,000
	1,873,894	1,813,849
NET REVENUES	\$ 406,789	\$ 422,793
Parity Bonds		
Principal	100,150	100,150
Interest	99,509	87,811
Subordinated Bonds Principal and Interest	-	10,000
Commercial Paper Interest	-	3,351
Parity Revenue Bond Debt Service	\$ 199,659	\$ 201,492
Debt Service Coverage/Fixed Charge Ratio	2.04	2.10

Notes:

1.) Includes transfer into the rate stabilization fund of: \$32,976,000

RANCHO SECO DECOMMISSIONING (As of 12/31/2022)

	<u>\$ Millions</u>
Total Decommissioning Cost Estimate (Excluding Site Restoration)	520.8
<u>Total Decommissioning Costs Incurred as of 12/31/2022</u>	<u>515.1</u>
Amount Needed for Remaining Decommissioning Costs	5.7
Balance in Decommissioning Fund ⁽¹⁾	9.0
Contribution to the Decommissioning Trust Fund in 2022	0
Estimate for Site Restoration Costs ⁽¹⁾	13.1

⁽¹⁾ Expected site restoration costs are not required to be funded per NRC requirements

ESTIMATED CAPITAL REQUIREMENTS
(Dollars in Thousands)

	Service Area and Other System Improvements Including Distribution System	Improvements to Existing Generation Plant	General Plant	Special Projects	Total Capital Requirements
2023	\$150,334	\$57,763	\$78,675	\$207,427	\$494,199
2024	195,581	40,608	97,225	216,229	549,643
2025	247,528	100,303	107,766	94,651	550,248
2026	247,528	100,303	107,766	94,651	550,248
2027	247,528	100,303	107,766	94,651	550,248