

## Burbank Water and Power Fiscal Year 2021-22 Adopted Budget Electric Fund Capital Plan

	2021-22 Adopted	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast	2025-26 Forecast	FY 2021-22 to FY 2025-26 Forecast Total
Power Supply Improvement Projects	3,712,526	240,000	1,250,000	3,850,000	1,800,000	10,852,526
Operations Technology	1,400,000	-	-	-	-	1,400,000
Distribution Expansion Projects	2,528,725	6,121,839	7,315,760	9,384,524	4,953,313	30,304,162
Distribution Replacement Projects	18,378,987	26,150,002	11,659,322	9,409,213	9,544,053	75,141,578
New Customer Projects/AIC	11,164,153	3,581,413	2,583,855	2,569,712	2,594,191	22,493,324
Facility Renovations	340,600	583,400	344,100	343,900	320,610	1,932,610
ONE Burbank	1,360,194	462,803	408,748	414,693	419,852	3,066,290
Finance, Warehouse and Fleet Facility	-	200,000	123,750	600,000	-	923,750
Customer Service	-	600,000	950,000	-	8,000,000	9,550,000
Security	-	75,000	100,000	-	100,000	275,000
Water Fund's share of common projects	(200,169)	(119,466)	(184,053)	(39,549)	(735,870)	(1,279,106)
<b>Total CIP</b>	<b>\$ 38,685,016</b>	<b>\$ 37,894,991</b>	<b>\$ 24,551,483</b>	<b>\$ 26,532,494</b>	<b>\$ 26,996,149</b>	<b>\$ 154,660,133</b>
Capital Outlay	2,514,480	1,888,020	1,925,780	1,964,296	2,003,582	10,296,158
Information Technology	197,000	64,605	177,000	154,875	150,000	743,480
Master Fleet Plan	643,550	3,119,650	2,849,750	1,894,500	1,503,025	10,010,475
<b>Total Capital Outlay</b>	<b>\$ 3,355,030</b>	<b>\$ 5,072,275</b>	<b>\$ 4,952,530</b>	<b>\$ 4,013,671</b>	<b>\$ 3,656,607</b>	<b>\$ 21,050,113</b>
<b>Grand Total for Electric CIP</b>	<b>\$ 42,040,046</b>	<b>\$ 42,967,266</b>	<b>\$ 29,504,013</b>	<b>\$ 30,546,165</b>	<b>\$ 30,652,756</b>	<b>\$ 175,710,246</b>

(A) Includes 20% for Safety, 12.5% for Customer Service, and 11.5% for Operations Technology, Facilities, Finance, and Security when applicable.

**Burbank Water and Power**  
**Fiscal Year 2021-22 Adopted Budget**  
**Electric Fund Capital Improvement Projects (CIP)**

	B	AY	BB	BE	BH	BK	BQ
1	Project	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	Total
2		Adopted	Forecast	Forecast	Forecast	Forecast	FY 2021/22 - 2025/26
3							
4	<b>Power Supply Improvement Projects</b>						
9	Cyber & Physical Security Systems - Energy Control Center	40,000	40,000				80,000
22	Energy Control Center (ECC) - Backup Control Center	554,122					554,122
23	Energy Trading Risk Management Software Replacement			750,000	750,000		1,500,000
34	Transmission Distribution Management System	718,404		100,000		200,000	1,018,404
42	Advanced Distributed Energy Resource Management (DERMS)			300,000			300,000
43	Lake NOx Emission System Retrofit	2,000,000					2,000,000
48	Municipal Rooftop Solar				3,000,000	1,500,000	4,500,000
50	Pacific Northwest DC Intertie	400,000	200,000	100,000	100,000	100,000	900,000
51	<b>Sub-Total</b>	<b>3,712,526</b>	<b>240,000</b>	<b>1,250,000</b>	<b>3,850,000</b>	<b>1,800,000</b>	<b>10,852,526</b>
52							
53	<b>Operations Technology</b>						
54	Operational Reliability	200,000					200,000
55	Security Operations Center (SOC)/Network Operations Center (NOC)	250,000					250,000
56	Data Center Hardware	550,000					550,000
62	Enterprise Data and Information Architecture Implementation	400,000					400,000
63	<b>Sub-Total</b>	<b>1,400,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,400,000</b>
64							
65	<b>Distribution Expansion Projects</b>						
78	Upgrade Circuit W-11 Overhead Lines		100,000				100,000
81	Upgrade Circuit M-2 Overhead Lines	542,120					542,120
87	Reconfigure 69 kV Lines at RSE for risk mitigation (Dept share)		187,000				187,000
90	Volt-ampere Reactives (VARs) Balancing	207,100	150,939	152,930	155,387	157,278	823,634
97	69kV Line Metering and Protection Upgrades		169,200	169,200			338,400
98	Replace GE Relays on 69kV Lines TBD (Dept Share)	52,526		351,860			404,386
100	Relay Setting Management and Version Control			150,000			150,000
104	Upgrade Relays for 34 kV Lines, Town-Flower		258,163				258,163
108	Install 34kV PTs for Metering and Protection		200,000	200,000			400,000
109	Upgrade 34kV Relays TBD				260,000	260,000	520,000
110	Replace 34kV GE Relays	305,165	370,000				675,165
116	Breaker Fail Program	181,522	150,000	150,000	150,000	150,000	781,522
117	Voltage Regulator Replacements		200,000				200,000
118	Customer Meter Voltage Monitoring		50,000	250,000			300,000
131	Install Transformer Temperature Monitors at Hollywood Way and Warner		115,000				115,000
132	Install Transformer Bushing Monitoring			50,000	300,000	300,000	650,000
133	Install Transformer Gas Monitor at RSE & Switching Stations (Dept Share)			139,000			139,000
139	Install Transformer Gas Monitor at Lincoln and Valley		125,000				125,000
140	Sudden Pressure Relay Replacement	103,011					103,011
151	Station Capacitor Bank Relay Upgrade at Lincoln					200,000	200,000
154	Standardized Capacitor Bank Control Upgrade					200,000	200,000

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1	Project	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	Total
2		Adopted	Forecast	Forecast	Forecast	Forecast	FY 2021/22 - 2025/26
3							
164	Replace GE Bus Relays at Capon				200,000		200,000
165	Bus Differential Relay Upgrade Valley					225,000	225,000
166	Bus Differential Installation at Hollywood Way					350,000	350,000
174	Ontario Distributing Station			863,514	1,192,472		2,055,986
175	Ontario Distributing Station - Transmission lines Build-out			565,000	750,000		1,315,000
176	Ontario Distributing Station - Distribution lines Build-out			575,000	227,667		802,667
177	Campus Micro-grid				3,600,000		3,600,000
178	Extend (existing-idle) 34kV line from Valley to Capon		2,000,000	1,500,000			3,500,000
189	DC Panel Upgrades Flower and McCambridge		100,000				100,000
190	DC Panel Upgrades TBD			100,000	50,000		150,000
197	Site Restoration of the Alameda/Old Hollywood Way Substation			550,000			550,000
202	Upgrade Work Force Management Software		100,000				100,000
203	Upgrade Geographic Information System (GIS)	100,870	500,000				600,870
204	Replace Transformer tracking software (TUGE)		75,000				75,000
205	Implement New Gridview Modules		50,000				50,000
206	Meter inventory System	184,348					184,348
208	Keystone Station Feeder Relay Upgrades				500,000		500,000
209	Burbank Primary Feeder Relays and MicroSCADA Replacement					500,000	500,000
213	Station Remote Terminal Units (RTU) Replacement		300,000	600,000	300,000		1,200,000
218	Electric Vehicle Charging Program	702,063	791,537	849,256	568,998	511,035	3,422,890
222	Substation Security Enhancements					100,000	100,000
224	Fiber Optic Infrastructure Expansion	150,000	130,000	100,000	130,000		510,000
227	Advanced Metering Infrastructure (AMI) Backhaul Network Replacement				1,000,000	1,000,000	2,000,000
228	AMI Collector Network Replacement					1,000,000	1,000,000
231	<b>Sub-Total</b>	<b>2,528,725</b>	<b>6,121,839</b>	<b>7,315,760</b>	<b>9,384,524</b>	<b>4,953,313</b>	<b>30,304,162</b>
232							
236	<b><u>Distribution Replacement Projects</u></b>						
239	4kV to 12kV Conversion Engineering	104,213	100,863	102,692	104,521	106,108	518,397
248	4 kV to 12 kV Conversion of Circuit W-1 (Partial)		500,000				500,000
250	4 kV to 12 kV Conversion of Circuit V-9	1,275,000					1,275,000
251	4 kV to 12 kV Conversion of Circuit V-8	3,304,162					3,304,162
252	4 kV to 12 kV Conversion of Circuit V-1		4,300,000	500,000			4,800,000
253	4 kV to 12 kV Conversion of Circuit V-14			4,400,000			4,400,000
254	4 kV to 12 kV Conversion of Circuit V-13				3,500,000		3,500,000
255	4 kV to 12 kV Conversion of Circuit V-2				1,400,000	1,000,000	2,400,000
256	4 kV to 12 kV Conversion of Circuit V-3					3,900,000	3,900,000
272	Media District 12kV Capacity	4,724,500	11,310,000	1,440,250			17,474,750
274	Replace Deteriorated Underground Electrical Dist. Lines	1,015,007	1,303,364	812,920	821,700	829,320	4,782,311
282	Replace Burbank Station Distribution Getaways	536,090	200,431				736,521
287	Replace 69 kV and 34.5 kV Lines Due to Deterioration	107,546	105,542	106,696	107,848	108,848	536,480

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	B	AY	BB	BE	BH	BK	BQ
1	Project	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	Total
2		Adopted	Forecast	Forecast	Forecast	Forecast	FY 2021/22 - 2025/26
3							
288	Replace Deteriorated Overhead Electrical Dist. Lines	1,569,222	1,006,900	1,021,533	1,036,167	1,048,867	5,682,689
289	Replace Services	513,037	503,083	509,621	516,158	521,833	2,563,732
290	Replacement Meters			100,000			100,000
291	Underground Existing Overhead Electric Lines		400,000	400,000	400,000	400,000	1,600,000
292	Protective Relay Network Replacement	500,000	300,000				800,000
293	Fiber Optic Infrastructure Replacement					100,000	100,000
296	Replace Obsolete Equipment and Minor System Upgrades at Substations	254,814	417,486	422,758	428,030	432,605	1,955,693
297	Transformer & Breaker Bushing Replacement	50,000	50,000	50,000	50,000	50,000	250,000
300	Replace Station Medium Voltage Oil/Air Circuit Breakers with Vacuum Circuit Breakers at TBD	133,490	400,000	400,000	400,000	400,000	1,733,490
303	Replace Station High Voltage Oil Circuit Breakers - TBD	214,748	210,000	420,000	420,000	420,000	1,684,748
310	Replace Batteries & Charger at TBD	101,303	100,302	100,942	101,582	102,138	506,267
312	Ground Grid Improvements	135,249	128,031	121,910	123,208	124,334	632,732
313	Substation Safety Shower Replacements	54,606					54,606
314	Distribution Substation Transformer Replacement			750,000			750,000
323	Golden State Substation Rebuild	3,786,000	4,814,000				8,600,000
324	<b>Sub-Total</b>	<b>18,378,987</b>	<b>26,150,002</b>	<b>11,659,322</b>	<b>9,409,213</b>	<b>9,544,053</b>	<b>75,141,578</b>
325							
329	<b>Aid In Construction (AIC)</b>						
330	Build New Customer Transformer Stations, 750 kVA & Under	820,822	804,658	814,535	824,413	832,985	4,097,413
334	Build Service to Large Project Over 1 MVA	2,513,527	2,511,644	1,522,879	1,538,427	1,551,921	9,638,398
339	Reconfigure 69 kV Lines at RSE for risk mitigation (AIC share)		33,000				33,000
342	Install Transformer Gas Monitor at RSE & Switching Stations (AIC Share)			11,550			11,550
349	69 kV Line Metering and Protection Upgrades		30,800	30,800			61,600
350	Replace 69kV GE Relays (AIC Share)	9,394					9,394
351	Media District 12kV Capacity (AIC Share)	5,613,850					5,613,850
352	Build Facilities for Avion Burbank Development	2,000,000					2,000,000
357	Provide Fiber Optic Services to Customers City Wide	206,560	201,311	204,091	206,872	209,285	1,028,119
359	<b>Sub-Total</b>	<b>11,164,153</b>	<b>3,581,413</b>	<b>2,583,855</b>	<b>2,569,712</b>	<b>2,594,191</b>	<b>22,493,324</b>
360							
361	<b>Electric Total</b>	<b>31,215,305</b>	<b>35,221,943</b>	<b>21,254,847</b>	<b>20,026,578</b>	<b>14,682,272</b>	<b>122,400,944</b>
365							
366	<b>Facility Renovations</b>						
373	Roof Replacement Program	100,000	75,000	75,000	75,000	75,000	400,000
382	Pedestrian access - Offsite Parking and Campus	50,000	250,000				300,000
383	Heating, Ventilation and Air Conditioning (HVAC) Upgrade for Campus Buildings	190,600	258,400	269,100	268,900	245,610	1,232,610
393	<b>Sub-Total</b>	<b>340,600</b>	<b>583,400</b>	<b>344,100</b>	<b>343,900</b>	<b>320,610</b>	<b>1,932,610</b>
394							
395	<b>ONE Burbank</b>						
396	ONE Burbank Network Infrastructure Expansion	414,110	402,803	408,748	414,693	419,852	2,060,206
397	Geographic Information System (GIS) Upgrades		60,000				60,000

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	B	AY	BB	BE	BH	BK	BQ
1	Project	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	Total
2		Adopted	Forecast	Forecast	Forecast	Forecast	FY 2021/22 - 2025/26
3							
400	Ethernet Switched Services Network (ESSN) Infrastructure Replacement	704,347					704,347
401	Wavelength-Division Multiplexing Equipment Replacement	241,737					241,737
403	<b>Sub-Total</b>	<b>1,360,194</b>	<b>462,803</b>	<b>408,748</b>	<b>414,693</b>	<b>419,852</b>	<b>3,066,290</b>
404							
405	<b>Finance, Warehouse and Fleet Facility</b>						
410	Vertical Lift Modules				600,000		600,000
414	Fleet Building Modification		200,000				200,000
425	Migrate Hyperion to cloud solution *			123,750			123,750
428	<b>Sub-Total</b>	<b>-</b>	<b>200,000</b>	<b>123,750</b>	<b>600,000</b>	<b>-</b>	<b>923,750</b>
429	* Driven by City Finance						
430							
431	<b>Customer Service</b>						
432	Meter Data Management System Replacement/Upgrade		350,000			2,000,000	2,350,000
434	Customer Information System Replacement/Upgrade			450,000		3,500,000	3,950,000
439	Customer Engagement Systems			450,000			450,000
441	Electric AMI Upgrade/Replacement		250,000			2,500,000	2,750,000
444	Interactive Voice Response (IVR) Upgrade			50,000			50,000
447	<b>Sub-Total</b>	<b>-</b>	<b>600,000</b>	<b>950,000</b>	<b>-</b>	<b>8,000,000</b>	<b>9,550,000</b>
448							
449	<b>Security</b>						
450	Cyber Security Protection & Monitoring		75,000			100,000	175,000
452	BWP Enterprise Security			100,000			100,000
453	<b>Sub-Total</b>	<b>-</b>	<b>75,000</b>	<b>100,000</b>	<b>-</b>	<b>100,000</b>	<b>275,000</b>
454							
464							
465	<b>Water Fund's Share of Common Projects</b>	<b>(200,169)</b>	<b>(119,466)</b>	<b>(184,053)</b>	<b>(39,549)</b>	<b>(735,870)</b>	<b>(1,279,106)</b>
468							
469	<b>Grand Total Electric Fund CIP Projects</b>	<b>38,685,016</b>	<b>37,894,991</b>	<b>24,551,483</b>	<b>26,532,494</b>	<b>26,996,149</b>	<b>154,660,133</b>