

Burbank Water and Power Fiscal Year 2022-23 Proposed Budget Electric Fund Capital Plan

DRAFT
Subject to Review and Change

	2022-23 Proposed	2023-24 Forecast	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	FY 2022-23 to FY 2026-27 Forecast Total
Power Supply Improvement Projects	13,020,000	1,290,000	5,850,000	5,340,000	5,200,000	30,700,000
Operations Technology	1,000,000	-	-	300,000	-	1,300,000
Distribution Expansion Projects	3,636,174	1,992,448	2,699,325	5,123,960	4,374,744	17,826,651
Distribution Replacement Projects	33,802,527	11,125,302	18,684,908	13,167,054	13,025,840	89,805,631
New Customer Projects/AIC	7,213,067	11,434,314	11,830,348	7,014,500	7,183,150	44,675,379
Facility Renovations	1,607,022	369,100	393,900	345,610	391,300	3,106,932
ONE Burbank	1,380,000	400,000	400,000	400,000	460,000	3,040,000
Finance, Warehouse and Fleet Facility	341,250	390,000	1,047,500	-	825,000	2,603,750
Customer Service	1,105,000	850,000	-	5,500,000	100,000	7,555,000
Security	355,000	100,000	-	150,000	150,000	755,000
Water Fund's share of common projects	(522,676)	(205,047)	(73,761)	(778,995)	(169,625)	(1,750,103) (A)
Total CIP	\$ 62,937,364	\$ 27,746,118	\$ 40,832,220	\$ 36,562,129	\$ 31,540,410	\$ 199,618,240
Capital Outlay	2,650,000	2,703,000	2,757,060	2,812,201	2,868,445	13,790,706
Information Technology	189,390	177,000	154,875	150,000	121,070	792,335
Master Fleet Plan	708,275	4,645,525	3,348,750	1,695,025	1,175,000	11,572,575
Total Capital Outlay	\$ 3,547,665	\$ 7,525,525	\$ 6,260,685	\$ 4,657,226	\$ 4,164,515	\$ 26,155,616
Grand Total for Electric CIP	\$ 66,485,029	\$ 35,271,643	\$ 47,092,905	\$ 41,219,356	\$ 35,704,925	\$ 225,773,856

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

**Burbank Water and Power
Fiscal Year 2022-23 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)**

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	B	BE	BF	BG	BH	BI	BP
1	Project	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 2022-23 to 2026-27
2		Proposed	Forecast	Forecast	Forecast	Forecast	Forecast Total
3							
4	Power Supply Improvement Projects						
9	Cyber & Physical Security Systems (ECC)	40,000	40,000		40,000		120,000
21	ECC Renovation/Rebuild					50,000	50,000
22	Backup Control Center (ECC)	200,000				50,000	250,000
23	Energy Trading Risk Management Software Replacement			750,000			750,000
34	Transmission Distribution Management System	750,000	100,000		200,000		1,050,000
42	Advanced Distributed Energy Resource Management (DERMS)		300,000				300,000
43	Lake NOx Emission System Retrofit	80,000					80,000
47	Regional Intermodal Transportation Center (RITC) Solar and Battery	10,000,000					10,000,000
48	Citywide solar and storage			5,000,000	5,000,000	5,000,000	15,000,000
50	EcoCampus Solar and Storage	1,750,000	750,000				2,500,000
51	Pacific Northwest DC Intertie	200,000	100,000	100,000	100,000	100,000	600,000
52	Sub-Total	13,020,000	1,290,000	5,850,000	5,340,000	5,200,000	30,700,000
53							
54	Operations Technology						
57	Data Center Hardware	800,000					800,000
63	Enterprise Data and Information Architecture Implementation	200,000			300,000		500,000
64	Sub-Total	1,000,000	-	-	300,000	-	1,300,000
65							
66	Distribution Expansion Projects						
69	Upgrade Circuit W-11 Overhead Lines	100,000					100,000
73	Upgrade 34.5 kV Lines					200,000	200,000
75	Install 34kV PTs for Metering and Protection		200,000	200,000			400,000
76	Upgrade 34kV Line & Cap Bank Relays TBD	258,163		260,000	260,000		778,163
77	Replace 34kV GE Relays		325,237	245,125			570,362
81	Reconfigure 69 kV Lines at RSE for risk mitigation (Dept share)	255,000					255,000
84	69kV Line Metering and Protection Upgrades		169,200	169,200			338,400
85	Replace GE Relays on 69kV Lines TBD (Dept Share)				351,860	150,000	501,860
103	Breaker Fail Program	150,000	150,000	150,000	150,000	150,000	750,000
120	Install Transformer Gas Monitor at RSE & Switching Stations (Dept Share)					139,000	139,000
127	Install Transformer Gas Monitor at BWP Stations-TBD				125,000		125,000
128	Install Transformer Temperature Monitors-TBD		115,000	115,000	115,000		345,000
129	Sudden Pressure Relay Replacement	103,011	103,011				206,022
141	Station Capacitor Bank Upgrade -TBD				200,000	325,744	525,744
142	Upgrade Reactors at Substations-TBD				200,000	200,000	400,000
145	Standardized Capacitor Bank Control Upgrade				200,000	200,000	400,000
165	Bus Differential Relay Upgrade (34kV)-TBD		250,000	250,000		200,000	700,000
166	Bus Differential Relay Upgrade (69kV)-TBD (Dept)				257,100		257,100

**Burbank Water and Power
Fiscal Year 2022-23 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)**

**DRAFT
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	B	BE	BF	BG	BH	BI	BP
1	Project	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 2022-23 to 2026-27
2		Proposed	Forecast	Forecast	Forecast	Forecast	Forecast Total
3							
169	Valley Station 34kV bypass to Lincoln after decommission					300,000	300,000
170	Repurpose Clybourn-industrial to Lincoln-Capon 34kV connection					500,000	500,000
189	Upgrade Work Force Management Software	100,000				100,000	200,000
190	Upgrade Geographic Information System (GIS)	500,000				300,000	800,000
191	Replace Transformer tracking software (TUGE)	75,000				75,000	150,000
192	Implement New Gridview Modules	50,000				50,000	100,000
199	Feeder & Cap Bank Relay Upgrade (4/12kV)-TBD			500,000	500,000		1,000,000
200	Bus Differential Relay Addition (4/12kV)				350,000	350,000	700,000
208	Seismic Electrical Connections Improvements-TBD			250,000	250,000		500,000
209	Electric Vehicle Charging Program	1,660,000	380,000	380,000	1,565,000	1,135,000	5,120,000
211	DC Panel Upgrades TBD	100,000	100,000	50,000			250,000
212	Back-up service to Burbank Substation and Energy Control Center	10,000	100,000				110,000
213	Station Cameras	90,000			350,000		440,000
215	Substation Security Enhancements				100,000		100,000
218	Wi-Fi Mesh Improvements	55,000					55,000
240	Fiber Optic Infrastructure Expansion	130,000	100,000	130,000	150,000		510,000
241	Sub-Total	3,636,174	1,992,448	2,699,325	5,123,960	4,374,744	17,826,651
242							
243	Distribution Replacement Projects						
272	4kV to 12kV Conversions	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000
273	Media District 12kV Capacity	17,008,729					17,008,729
274	Golden State Substation Rebuild	5,476,318					5,476,318
275	Underground Existing Overhead Electric Lines	200,000	400,000	400,000	400,000	400,000	1,800,000
276	Underground Utility District - North San Fernando	200,000					200,000
277	Replace Deteriorated Underground Electrical Dist. Lines	750,000	750,000	821,700	829,320	832,440	3,983,460
278	Replace Deteriorated Overhead Electrical Dist. Lines	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000
279	Replace Services	555,000	550,000	560,000	565,000	570,000	2,800,000
283	Restore condition of padmount transformers in stock	55,000					55,000
284	Replace 69 kV and 34.5 kV Lines Due to Deterioration	500,000	400,000	405,000	405,000	410,000	2,120,000
285	Replacement of AMI		100,000	8,000,000	1,500,000	1,500,000	11,100,000
286	Performance Meters	20,000	20,000	20,000	20,000	20,000	100,000
287	Protective Relay Network Replacement	547,480					547,480
288	Fiber Optic Infrastructure Replacement					100,000	100,000
290	Replace Obsolete Equipment and Minor System Upgrades at Substations	300,000	300,000	300,000	300,000	300,000	1,500,000
291	Replace Station 69kV Equipment at RSE- LADWP TIE-TBD	480,000			1,028,400	1,028,400	2,536,800
295	Replace Station Medium Voltage Oil/Air Circuit Breakers with Vacuum Circuit Breakers at TBD	200,000	320,000	320,000	320,000	320,000	1,480,000
298	Replace Station High Voltage Oil Circuit Breakers - TBD	310,000	420,000	420,000	420,000	420,000	1,990,000

**Burbank Water and Power
Fiscal Year 2022-23 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)**

**DRAFT
Subject to Review and Change**

	B	BE	BF	BG	BH	BI	BP
1	Project	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 2022-23 to 2026-27
2		Proposed	Forecast	Forecast	Forecast	Forecast	Forecast Total
3							
305	Replace Batteries & Charger at TBD		100,302				100,302
307	Ground Grid Improvements		300,000	123,208	124,334		547,542
308	Substation Improvements-EHS Safety Recommendations	100,000	100,000	100,000			300,000
309	Substation Plumbing Upgrades & Safety Shower Replacements	100,000	90,000	90,000	130,000		410,000
317	Refeed Olive Sw. Station Service Power		150,000				150,000
318	Distribution Substation Transformer Fire Walls Addition		125,000	125,000	125,000	125,000	500,000
339	Sub-Total	33,802,527	11,125,302	18,684,908	13,167,054	13,025,840	89,805,631
340							
341	<u>Aid In Construction (AIC)</u>						
342	Build New Customer Transformer Stations, 750 kVA & Under	1,000,000	1,200,000	1,400,000	1,600,000	1,800,000	7,000,000
346	Reconfigure 69 kV Lines at RSE for risk mitigation (AIC share)	45,000					45,000
347	Build Service to Large Project Over 1 MVA	5,500,000	8,000,000	8,000,000	5,000,000	5,000,000	31,500,000
353	Replace Station 69kV Equipment at RSE- LADWP TIE-TBD (AIC Share)	80,100			171,600	171,600	423,300
354	Install Transformer Gas Monitor at RSE & Switching Stations (AIC Share)					11,550	11,550
361	69 kV Line Metering and Protection Upgrades		30,800	30,800			61,600
362	Replace 69kV GE Relays AIC (MPP Share)			29,409			29,409
364	Ontario Distributing Station		863,514	1,192,472			2,055,986
365	Ontario Distributing Station - Transmission lines Build-out		565,000	750,000			1,315,000
366	Ontario Distributing Station - Distribution lines Build-out		575,000	227,667			802,667
367	Bus Differential Relay Upgrade (69kV)-TBD (AIC Share)				42,900		42,900
368	Media District 12kV Capacity (AIC Share)	387,967					387,967
372	Provide Fiber Optic Services to Customers City Wide	200,000	200,000	200,000	200,000	200,000	1,000,000
377	Sub-Total	7,213,067	11,434,314	11,830,348	7,014,500	7,183,150	44,675,379
378							
379	Electric Total	43,629,288	24,252,064	32,884,581	24,505,514	24,283,734	149,555,181
380							
381	<u>Facility Renovations</u>						
382	Campus Stormwater Management Program	818,622					818,622
383	Roof Replacement Program	200,000	100,000	100,000	100,000	100,000	600,000
385	HVAC Upgrade for Campus Buildings	258,400	269,100	268,900	245,610	266,300	1,308,310
387	Day Ahead Planning and Resource Center	80,000					80,000
389	EHS Office Relocation Project	150,000					150,000
390	BWP Audio and Video Life Cycle Program	100,000		25,000		25,000	150,000
411	Sub-Total	1,607,022	369,100	393,900	345,610	391,300	3,106,932
412							
413	<u>ONE Burbank</u>						
414	ONE Burbank Network Infrastructure Expansion	400,000	400,000	400,000	400,000	400,000	2,000,000
415	Geographic Information System (GIS) Upgrades	60,000				60,000	120,000

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1	Project	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 2022-23 to 2026-27
2		Proposed	Forecast	Forecast	Forecast	Forecast	Forecast Total
3							
418	ESSN Network Infrastructure Replacement	750,000					750,000
421	Community Broadband Feasibility Study	170,000					170,000
422	Sub-Total	1,380,000	400,000	400,000	400,000	460,000	3,040,000
423							
424	Finance, Warehouse and Fleet Facility						
429	Vertical Lift Modules			800,000			800,000
431	Warehouse Scanning and Equipment	100,000					100,000
433	Fleet Covered Structure	200,000					200,000
442	Oracle to cloud or ERP replacement *					825,000	825,000
444	Migrate Hyperion to cloud *		165,000				165,000
445	WAM Upgrade to Cloud *		125,000	247,500			372,500
448	Robotic Processing Automation Study	41,250					41,250
449	Robotic Processing Automation		100,000				100,000
450	Sub-Total	341,250	390,000	1,047,500	-	825,000	2,603,750
452							
453	Customer Service						
454	Meter Data Management System Replacement/Upgrade		350,000		2,000,000		2,350,000
456	Customer Information System Replacement/Upgrade	650,000	100,000		3,500,000		4,250,000
459	Customer Relationship Management/Analytics	75,000					75,000
461	Customer Engagement Systems	100,000	400,000			100,000	600,000
466	Outage communications	80,000					80,000
467	Call Center Technology enhancements	200,000					200,000
470	Sub-Total	1,105,000	850,000	-	5,500,000	100,000	7,555,000
471							
472	Security						
473	OT Cyber Security Protection & Monitoring	150,000			150,000		300,000
474	BWP Campus Network Update	65,000					65,000
475	BWP Enterprise Physical Security	140,000	100,000			150,000	390,000
476	Sub-Total	355,000	100,000	-	150,000	150,000	755,000
477							
487							
488	Water Fund's Share of Common Projects	(522,676)	(205,047)	(73,761)	(778,995)	(169,625)	(1,750,103)
489							
492	Grand Total Electric Fund CIP Projects	62,937,364	27,746,118	40,832,220	36,562,129	31,540,410	199,618,240