

Burbank Water and Power Fiscal Years 2023-24 and 2024-25 Proposed Budget Electric Fund Capital Plan

DRAFT
Subject to Review and Change

	2023-24	2024-25	2025-26	2026-27	2027-28	FY 2023-24 to FY 2027-28
	Proposed	Proposed	Forecast	Forecast	Forecast	Forecast Total
Power Supply Improvement Projects	5,203,093	10,775,000	10,515,000	16,075,000	16,315,000	58,883,093
Operations Technology	1,151,937	455,487	-	300,000	-	1,907,424
Distribution Expansion Projects	3,946,904	7,306,628	5,652,350	2,792,500	5,380,000	25,078,382
Distribution Replacement Projects	16,163,085	13,443,195	14,229,904	13,588,690	14,457,450	71,882,324
New Customer Projects/AIC	16,980,800	9,680,800	7,153,339	7,203,189	10,438,609	51,456,736
Facility Renovations	2,836,212	1,755,308	370,610	391,300	279,900	5,633,330
ONE Burbank	800,000	560,000	500,000	500,000	500,000	2,860,000
Finance, Warehouse and Fleet Facility	506,900	622,500	-	1,625,000	907,500	3,661,900
Customer Service	2,075,000	800,000	-	-	-	2,875,000
Sustainability and Marketing	435,000	-	-	50,000	150,000	635,000
Security	490,574	612,128	150,000	200,000	150,000	1,602,702
Safety	150,000	-	-	-	-	150,000
Water Fund's share of common projects	(945,097)	(496,224)	(59,870)	(222,375)	(228,801)	(1,952,366) (A)
Total CIP	\$ 49,794,408	\$ 45,514,822	\$ 38,511,333	\$ 42,503,304	\$ 48,349,658	\$ 224,673,526
Capital Outlay	3,300,000	4,100,000	4,182,000	4,265,640	4,350,953	20,198,593
Information Technology	177,000	154,875	150,000	121,070	123,491	726,436
Master Fleet Plan	1,252,700	600,000	6,174,050	2,585,375	2,892,500	13,504,625
Total Capital Outlay	\$ 4,729,700	\$ 4,854,875	\$ 10,506,050	\$ 6,972,085	\$ 7,366,944	\$ 34,429,654
Grand Total for Electric CIP	\$ 54,524,108	\$ 50,369,697	\$ 49,017,383	\$ 49,475,389	\$ 55,716,602	\$ 259,103,180

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

**Burbank Water and Power
Fiscal Years 2023-24 and 2024-25 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)**

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	E	BQ	BR	BS	BT	BU	CB
1	Project	FY 23-24 Proposed	FY 24-25 Proposed	FY 25-26 Forecast	FY 26-27 Forecast	FY 27-28 Forecast	FY 2023-24 to 2027-28 Forecast Total
3							
4	Power Supply Improvement Projects						
9	Cyber & Physical Security Systems (ECC)	78,093		40,000		40,000	158,093
14	SCADA Hardware				600,000		600,000
21	ECC Renovation/Rebuild	100,000					100,000
22	Backup Control Center (ECC)				50,000		50,000
24	Energy Trading Risk Management Software Replacement				150,000	1,000,000	1,150,000
35	Transmission Distribution Management System	350,000	300,000	200,000			850,000
43	Advanced Distributed Energy Resource Management (DERMS)	300,000					300,000
48	Unidentified ECC Hardware and Software	75,000	75,000	75,000	75,000	75,000	375,000
49	ECC GIS Integration to Utility Network Model	750,000					750,000
51	Regional Intermodal Transportation Center (RITC) Solar and Battery	1,700,000					1,700,000
52	Citywide Solar and Storage	700,000	10,000,000	10,000,000	15,000,000	15,000,000	50,700,000
54	EcoCampus Solar and Storage	750,000					750,000
55	Pacific Northwest DC Intertie	400,000	400,000	200,000	200,000	200,000	1,400,000
56	Sub-Total	5,203,093	10,775,000	10,515,000	16,075,000	16,315,000	58,883,093
57							
58	Operations Technology						
59	Operational Reliability	-	150,000				150,000
60	Networking Infrastructure	380,374	157,578		200,000		737,952
62	Data Center Hardware	771,563	147,909				919,472
68	Enterprise Data and Information Architecture Implementation				100,000		100,000
69	Sub-Total	1,151,937	455,487	-	300,000	-	1,907,424
70							
71	Distribution Expansion Projects						
78	Upgrade 34.5 kV Lines					200,000	200,000
81	Upgrade 34kV Line & Cap Bank Relays TBD	100,000	260,000			260,000	620,000
82	Replace 34kV GE Relays		150,000	210,000	210,000		570,000
88	Upgrade 69 kV Line & Cap Bank Relays TBD (Dept)					225,000	225,000
89	69kV Line Metering and Protection Upgrades	169,200	169,200				338,400
90	Replace GE Relays on 69kV Lines TBD (Dept Share)			642,750			642,750
91	VAR Balancing			25,000	25,000	175,000	225,000
108	Breaker Fail Program	150,000	150,000	150,000	150,000	150,000	750,000
110	Customer Meter Voltage Monitoring					50,000	50,000
124	Install Transformer Bushing Monitoring					50,000	50,000
132	Install Transformer Gas Monitor at BWP Stations-TBD	125,000	125,000	125,000			375,000
133	Install Transformer Temperature Monitors-TBD	115,000	115,000	115,000			345,000
134	Sudden Pressure Relay Replacement	100,000	100,000				200,000
146	Station Capacitor Bank Upgrade -TBD	150,000	150,000				300,000
147	Upgrade Reactors at Substations-TBD			200,000		200,000	400,000
150	Standardized Capacitor Bank Control Upgrade					200,000	200,000
151	Capon Cap Bank Control Upgrade	100,000					100,000
170	Bus Differential Relay Upgrade (34kV)-TBD	250,000			200,000	250,000	700,000
171	Bus Differential Relay Upgrade (69kV)-TBD (Dept)			257,100			257,100

**Burbank Water and Power
Fiscal Years 2023-24 and 2024-25 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)**

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E		BQ	BR	BS	BT	BU	CB
1	Project	FY 23-24 Proposed	FY 24-25 Proposed	FY 25-26 Forecast	FY 26-27 Forecast	FY 27-28 Forecast	FY 2023-24 to 2027-28 Forecast Total
3							
174	Valley Station 34kV bypass to Lincoln after Decommission					300,000	300,000
175	Repurpose Clybourn-industrial to Lincoln-Capon 34kV Connection					500,000	500,000
189	Drawing Document System		100,000				100,000
194	Upgrade Work Force Management Software		100,000				100,000
195	Upgrade Geographic Information System (GIS)	448,157	272,948				721,105
197	Implement New Analytics Modules			50,000			50,000
199	Implement New System Modeling Software	50,000					50,000
205	Feeder & Cap Bank Relay Upgrade (4/12kV)-TBD	500,000		500,000			1,000,000
206	Bus Differential Relay Addition (4/12kV)			350,000	350,000	350,000	1,050,000
209	Station Remote Terminal Unit (RTU) Replacement	104,547	423,327	600,000	300,000		1,427,874
214	Seismic Electrical Conections Improvements-TBD		50,000			250,000	300,000
215	Electric Vehicle Charging Program	380,000	380,000	1,565,000	1,135,000	970,000	4,430,000
216	Electric Distribution Masterplan Update			500,000			500,000
217	DC Panel Upgrades TBD	100,000	100,000				200,000
218	Back-up Service to Energy Control Center					500,000	500,000
219	Station Security	50,000	50,000	50,000	50,000	50,000	250,000
221	Substation Security Enhancements	100,000	100,000	100,000	100,000		400,000
224	Wi-Fi Mesh Improvements	55,000	50,000		60,000		165,000
227	Application Enhancements	100,000	100,000	50,000	50,000	50,000	350,000
246	Pacific Substation Site Restoration					150,000	150,000
247	Refeed Station Service for Burbank Substation	300,000					300,000
248	Rebuild the DOC	150,000					150,000
249	Relocate the Maps & Records Group	150,000					150,000
250	Ontario Substation- 3rd Bank and Line	-	4,173,653				4,173,653
251	Downtown District Capacity Upgrade (Dept Share)					500,000	500,000
252	Fiber Optic Infrastructure Expansion	200,000	187,500	162,500	162,500		712,500
253	Sub-Total	3,946,904	7,306,628	5,652,350	2,792,500	5,380,000	25,078,382
254							
255	Distribution Replacement Projects						
284	4kV to 12kV Conversions	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	27,500,000
285	Media District 12kV Capacity	4,600,000					4,600,000
287	Underground Existing Overhead Electric Lines	400,000	400,000	400,000	400,000	400,000	2,000,000
289	Replace Deteriorated Underground Electrical Dist. Lines	750,000	821,700	829,320	832,440	836,200	4,069,660
290	Replace Deteriorated Overhead Electrical Dist. Lines	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000
291	Replace Services	550,000	560,000	565,000	570,000	575,000	2,820,000
296	Replace 69 kV and 34.5 kV Lines Due to Deterioration	400,000	405,000	405,000	410,000	410,000	2,030,000
297	Replacement of AMI	183,085	2,263,287	1,800,000	1,800,000	1,800,000	7,846,372
298	Performance Meters	20,000	20,000	20,000	20,000	20,000	100,000
300	Fiber Optic Infrastructure Replacement	100,000	100,000	100,000	100,000	100,000	500,000
302	Replace Obsolete Equipment and Minor System Upgrades at Substations	300,000	300,000	300,000	300,000	300,000	1,500,000
304	Replace Station 69kV Equipment at RSE- LADWP TIE-TBD			1,071,250	1,071,250	1,071,250	3,213,750
308	Replace Station Medium Voltage Oil/Air Circuit Breakers with Vacuum Circuit Breakers at TBD	200,000	200,000	200,000	200,000	360,000	1,160,000
311	Replace Station High Voltage Oil Circuit Breakers 34kV - TBD	260,000	260,000	260,000	260,000	260,000	1,300,000

**Burbank Water and Power
Fiscal Years 2023-24 and 2024-25 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)**

**DRAFT
Subject to Review and Change**

E		BQ	BR	BS	BT	BU	CB
1	Project	FY 23-24 Proposed	FY 24-25 Proposed	FY 25-26 Forecast	FY 26-27 Forecast	FY 27-28 Forecast	FY 2023-24 to 2027-28 Forecast Total
3							
318	Replace Batteries & Charger at TBD	110,000					110,000
320	Ground Grid Improvements	300,000	123,208	124,334			547,542
321	Substation Improvements-EHS Safety Recommendations	100,000	100,000				200,000
322	Substation Plumbing Upgrades & Safety Shower Replacements	90,000	90,000	130,000			310,000
323	Substation Water Flow Backflow Device Addition	50,000	50,000				100,000
332	Distribution Substation Transformer Fire Walls Addition	125,000	125,000	125,000	125,000	125,000	625,000
334	Victory Decommissioning					300,000	300,000
336	Replace Station Communication Processors (SEL-2030s)	125,000	125,000				250,000
337	Upgrade Transformer to Low Side Breaker Cable			400,000			400,000
338	Upgrade Switchgear Getaway 4 kV Cable					400,000	400,000
356	Sub-Total	16,163,085	13,443,195	14,229,904	13,588,690	14,457,450	71,882,324
357							
358	Aid In Construction (AIC)						
359	Build New Customer Transformer Stations, 750 kVA & Under	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	8,000,000
364	Build Service to Large Project Over 1 MVA	8,000,000	8,000,000	5,000,000	5,000,000	5,000,000	31,000,000
370	Replace Station 69kV Equipment at RSE- LADWP TIE-TBD (AIC Share)			153,189	153,189	153,189	459,566
377	Updgrade 69 kV Line & Cap Bank Relays TBD (AIC Share)					35,420	35,420
378	69 kV Line Metering and Protection Upgrades	30,800	30,800				61,600
379	Replace 69kV GE Relays AIC (MPP Share)			107,250			107,250
384	Bus Differential Relay Upgrade (69kV)-TBD (AIC Share)			42,900			42,900
385	Media District 12kV Capacity (AIC Share)	5,500,000					5,500,000
389	Ontario Substation- 3rd Bank and Line (AIC Share)	2,000,000					2,000,000
390	Downtown District Capacity (AIC Share)					3,000,000	3,000,000
391	Provide Fiber Optic Services to Customers City Wide	250,000	250,000	250,000	250,000	250,000	1,250,000
396	Sub-Total	16,980,800	9,680,800	7,153,339	7,203,189	10,438,609	51,456,736
397							
398	Electric Total	36,335,789	29,693,123	26,373,093	22,861,879	29,876,059	145,139,943
399							
400	Facility Renovations						
401	Campus Stormwater Management Program	1,967,112	1,311,408				3,278,520
402	Roof Replacement Program	100,000	100,000	100,000	100,000	100,000	500,000
404	HVAC Upgrade for Campus Buildings	269,100	268,900	245,610	266,300	154,900	1,204,810
405	HVAC Upgrade Study & Project for ECC	100,000					100,000
406	Day Ahead Planning and Resource Center	300,000					300,000
409	BWP Audio and Video Life Cycle Program	50,000	25,000	25,000	25,000	25,000	150,000
410	Assets Management Ticketing System	50,000	50,000				100,000
432	Sub-Total	2,836,212	1,755,308	370,610	391,300	279,900	5,633,330
433							
434	ONE Burbank						
435	ONE Burbank Network Infrastructure Expansion	500,000	500,000	500,000	500,000	500,000	2,500,000
436	Geographic Information System (GIS) Upgrades		60,000				60,000
440	Wavelength-Division Multiplexing Equipment Replacement	300,000					300,000
444	Sub-Total	800,000	560,000	500,000	500,000	500,000	2,860,000

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E		BQ	BR	BS	BT	BU	CB
1	Project	FY 23-24 Proposed	FY 24-25 Proposed	FY 25-26 Forecast	FY 26-27 Forecast	FY 27-28 Forecast	FY 2023-24 to 2027-28 Forecast Total
3							
445							
446	Finance, Warehouse and Fleet Facility						
451	Vertical Lift Modules				800,000		800,000
464	Oracle to Cloud or ERP Replacement *				825,000	907,500	1,732,500
465	Work Order Asset Management System Upgrades	100,000	372,500				472,500
466	Migrate Hyperion to Cloud *	264,000					264,000
470	Capital Planning and Accounting Mgmt Syst/Study	42,900	250,000				292,900
471	Robotic Processing Automation	100,000					100,000
473	Sub-Total	506,900	622,500	-	1,625,000	907,500	3,661,900
474	* Driven by City Finance						-
475							
476	Customer Service						
477	Meter Data Management System Replacement/Upgrade	1,500,000					1,500,000
479	Customer Information System Replacement/Upgrade	350,000					350,000
481	Customer Payment Options		800,000				800,000
488	Customer Service/Sustainability Marketing & Strategy Facility Improvements	225,000					225,000
490	Sub-Total	2,075,000	800,000	-	-	-	2,875,000
491							
492	Sustainability and Marketing						
493	CRM Tool - Free Agent/Responsys					50,000	50,000
494	Enterprise Data Platform - SMS Analytics Use Case				50,000		50,000
495	Marketing Automation (turns into O&M licensing)	60,000					60,000
496	Website Upgrade (5 year cycle updates)	50,000				100,000	150,000
497	Sustainability Engagement	100,000					100,000
498	TOU Rate Transition	225,000					225,000
502	Sub-Total	435,000	-	-	50,000	150,000	635,000
503							
504	Security						
505	OT Cyber Security Protection & Monitoring	390,574	562,128	150,000	50,000	150,000	1,302,702
507	BWP Enterprise Physical Security	100,000	50,000		150,000		300,000
508	Sub-Total	490,574	612,128	150,000	200,000	150,000	1,602,702
509							
510	Safety						
514	Emergency Exit in Black Wrought Iron West Wing of Admin	50,000					50,000
515	Emergency Exit from Admin, East Wing, 1st & 2nd floor	100,000					100,000
517	Sub-Total	150,000	-	-	-	-	150,000
518							
519							
520	Water Fund's Share of Common Projects	(945,097)	(496,224)	(59,870)	(222,375)	(228,801)	(1,952,366)
523							-
524	Grand Total Electric Fund CIP Projects	49,794,408	45,514,822	38,511,333	42,503,304	48,349,658	224,673,526