

Burbank Water and Power Fiscal Year 2017-18 Proposed Budget Electric Fund Capital Plan

DRAFT
Subject to Review and Change

	2017-18 Proposed	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	FY 2017-18 to FY 2021-22 Forecast
Power Supply Improvement Projects	7,717,091	1,100,000	1,100,000	100,000	100,000	10,117,091
Operations Technology	-	250,000	-	-	-	250,000
Distribution Expansion Projects	8,101,294	4,302,683	2,708,644	2,362,342	2,465,711	19,940,674
Distribution Replacement Projects	6,918,457	6,067,815	7,810,700	6,558,661	6,214,925	33,570,559
Facility Renovations	307,000	350,000	350,000	350,000	350,000	1,707,000
ONE Burbank	300,000	300,000	250,000	300,000	250,000	1,400,000
Finance, Warehouse and Fleet Facility	-	25,000	1,500,000	-	-	1,525,000
Customer Service	250,000	-	1,753,023	360,000	250,000	2,613,023
Security	582,843	-	-	-	-	582,843
Water Fund's share of common projects (A)	(133,582)	(43,125)	(431,878)	(85,250)	(71,500)	(765,335)
Total	\$ 24,043,104	\$ 12,352,373	\$ 15,040,490	\$ 9,945,753	\$ 9,559,136	\$ 70,940,855
New Customer Projects/AIC	7,764,063	3,778,020	2,437,725	2,358,625	1,763,404	18,101,838
Total AIC	\$ 7,764,063	\$ 3,778,020	\$ 2,437,725	\$ 2,358,625	\$ 1,763,404	\$ 18,101,838
Total CIP	\$ 31,807,167	\$ 16,130,393	\$ 17,478,215	\$ 12,304,378	\$ 11,322,540	\$ 89,042,693
Capital Outlay	969,050	988,431	1,008,200	1,028,364	1,048,931	5,042,975
Information Technology	488,190	374,439	526,492	192,927	212,539	1,794,587
Master Fleet Plan	202,625	1,780,053	1,419,508	1,545,600	1,277,870	6,225,655
Total Capital Outlay	\$ 1,659,865	\$ 3,142,923	\$ 2,954,199	\$ 2,766,891	\$ 2,539,340	\$ 13,063,217
Grand Total for Electric CIP	\$ 33,467,032	\$ 19,273,316	\$ 20,432,414	\$ 15,071,269	\$ 13,861,880	\$ 102,105,910

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

Burbank Water and Power
Fiscal Year 2017-18 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)

	B	AE	AF	AG	AH	AI	AJ
1	Project	FY 17-18 Proposed	FY 18-19 Forecast	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	Total FY 2017/18 - 2021/22
2							
3							
4	Power Supply Improvement Projects						
7	Landfill Generator Upgrade	3,900,000					3,900,000
13	SCADA Communications - Redundant Path	74,691					74,691
14	SCADA VM Hardware	302,400					302,400
31	Advanced Distribution Management System	2,000,000					2,000,000
36	Magnolia Service Building Uninterruptible Power Supply (UPS)	340,000					340,000
42	Pacific Northwest DC Intertie	1,100,000	1,100,000	1,100,000	100,000	100,000	3,500,000
43	Sub-Total	7,717,091	1,100,000	1,100,000	100,000	100,000	10,117,091
44							
45	Operations Technology						
46	Network Manager of Managers (MOM)		250,000				250,000
51	Sub-Total	-	250,000	-	-	-	250,000
52							
53	Distribution Expansion Projects						
62	Upgrade Circuit F-8 Overhead Lines				104,000		104,000
63	Upgrade Circuit F-3 Overhead Lines				78,000		78,000
64	Upgrade Circuit M-11 Overhead Lines	-	364,000				364,000
65	Upgrade Circuit M-2 Overhead Lines	364,000					364,000
66	Upgrade Circuit W-11 Overhead Lines			260,000	-		260,000
67	Upgrade Circuit TBD Overhead Lines					300,000	300,000
69	Upgrade 34.5 kV Lines			104,535			104,535
73	Upgrade 69 kV Lines TBD (Dept share)		104,535				104,535
74	Reconfigure 69 kV Lines at RSE for risk mitigation (Dept share)	50,000					50,000
76	Install PM switch at Brace Park for McCambridge circuit sectionalization	200,000					200,000
77	Voltage Corrections	156,794	156,794	156,794	156,794	156,794	783,968
80	Upgrade Relays for 69 kV Lines, Lincoln-Valley #1	128,628				-	128,628
81	Upgrade Relays for 69 kV Lines, Lincoln-Valley #2					128,628	128,628
84	Upgrade Relays for 34 kV Lines, Lincoln-Pacific			128,628			128,628
85	Upgrade Relays for 34 kV Lines, Town-Flower		258,163				258,163
86	Upgrade Relays for 34 kV Lines, Victory-Valley #1			258,163			258,163
87	Upgrade Relays for 34 kV Lines, Winona-Lincoln			258,163			258,163
90	Upgrade Voltage Regulator Controllers at McCambridge Substation			182,558			182,558
91	Upgrade Voltage Regulator Controllers at Winona Substation				203,163		203,163
92	Upgrade Voltage Regulator Controllers at Flower Substation					187,558	187,558
93	Upgrade Voltage Regulator Controllers at Naomi Substation					177,256	177,256
96	Upgrade Station Transformer Relays at Valley & Lincoln	308,991					308,991
97	Upgrade Station Transformer Relays at McCambridge		308,991				308,991
98	Upgrade Station Transformer Relays at Keystone & Warner			308,991			308,991
99	Upgrade Station Transformer Relays at Naomi				308,991		308,991
102	Install Transformer Temperature Monitors at Naomi & Clybourn	113,023					113,023
103	Install Transformer Temperature Monitors at San Jose & Keystone		113,023				113,023
104	Install Transformer Temperature Monitors at Lincoln & Valley (dept share)			56,512			56,512
105	Install Transformer Temperature Monitors at Capon & Olive (dept share)				56,512		56,512

Burbank Water and Power
Fiscal Year 2017-18 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)

	B	AE	AF	AG	AH	AI	AJ
1	Project	FY 17-18 Proposed	FY 18-19 Forecast	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	Total FY 2017/18 - 2021/22
2							
106	Install Transformer Gas Monitor at RSE & Switching Stations (Dept Share)	-	-			89,919	89,919
108	Install Transformer Gas Monitor at Golden State & Flower Stations	102,721					102,721
109	Install Transformer Gas Monitor at Winona Station		102,721				102,721
110	Install Transformer Gas Monitor at Clybourn, Town, & San Jose Stations			118,326			118,326
111	Install Transformer Gas Monitor at Naomi & Keystone Stations				102,721		102,721
114	Distribution Substation Transformer Backup & Mobile Substation	1,200,000	-				1,200,000
117	Station Capacitor Bank Upgrade at Clybourn		203,628				203,628
118	Station Capacitor Bank Upgrade at Town			325,744			325,744
119	Station Capacitor Bank Upgrade at Naomi				325,744		325,744
122	Upgrade Bus Differential Relays at Town & Naomi	257,558					257,558
123	Upgrade Bus Differential Relays at Winona & NBC		257,558				257,558
131	Ontario Distributing Station	324,426	923,776				1,248,202
132	Ontario Distributing Station - Transmission lines Build-out	3,359,000					3,359,000
133	Ontario Distributing Station - Distribution lines Build-out	100,000	805,333				905,333
135	Switchgear Remote Racking at Golden State, San Jose & Naomi	182,721					182,721
136	Switchgear Remote Racking at Keystone & Burbank		131,814				131,814
139	Station Service Transformer Upgrade at Town		52,116				52,116
141	Station Service Transformer Upgrade at Flower	52,116					52,116
142	Automatic Bus Transfer Scheme at Burbank & Hollywood Way				156,047		156,047

Burbank Water and Power
Fiscal Year 2017-18 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)

	B	AE	AF	AG	AH	AI	AJ
1	Project	FY 17-18 Proposed	FY 18-19 Forecast	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	Total FY 2017/18 - 2021/22
2							
143	Automatic Bus Transfer Scheme at Clybourn & Town		156,047				156,047
144	Automatic Bus Transfer Scheme at Naomi & San Jose			156,047			156,047
145	Automatic Bus Transfer Scheme at Golden State & Keystone				156,047		156,047
152	Implement Work Force Management Software	108,000			-		108,000
153	Upgrade Geographic Information System (GIS)				251,512		251,512
154	Implement New Gridview Modules	50,000					50,000
156	Keystone Station Feeder Relay Upgrades					500,000	500,000
157	Burbank Primary Feeder Relays and MicroSCADA Replacement					500,000	500,000
158	Station RTU Replacement					300,000	300,000
159	Olive A4 and A5 Neutral Current Limiting Reactor Addition	169,000					169,000
163	Electric Vehicle Charging Program	204,184	204,184	204,184	204,184	204,184	1,020,922
164	Station Cameras	372,000					372,000
165	Station Door Alarms	120,000					120,000
167	Fiber Optic Infrastructure Expansion	75,000	160,000	190,000	130,000	50,000	605,000
169	Wi-Fi Mesh Improvements	103,132	-	-	-	-	103,132
170	Sub-Total	8,101,294	4,302,683	2,708,644	2,362,342	2,465,711	19,940,674
171							-
172	Distribution Replacement Projects						
175	4 kV to 12 kV Conversion of Circuit BB-3	2,000,000	-				2,000,000
178	4 kV to 12 kV Conversion of Circuit N-17 & N-13 to HW-11		209,070				209,070
179	4 kV to 12 kV Conversion of Circuit V-4 to circuit TBD	1,800,000	1,500,000				3,300,000
180	4 kV to 12 kV Conversion of Circuit V-7 to circuit TBD	100,000	1,200,000	700,000			2,000,000
182	4 kV to 12 kV Conversion of Circuit V-12 to circuit TBD	-	100,000	2,100,000	800,000		3,000,000
183	4 kV to 12 kV Conversion of Circuit V-9 to circuit TBD			100,000	1,900,000		2,000,000
184	4 kV to 12 kV Conversion of Circuit V-2 to circuit TBD				100,000	1,800,000	1,900,000
185	4 kV to 12 kV Conversion of Circuit V-3 to circuit TBD				100,000	1,000,000	1,100,000
186	4 kV to 12 kV Conversion of Circuit TBD (engineering)					100,000	100,000
187	Replace Deteriorated Underground Electrical Dist. Lines	603,992	603,992	603,992	603,992	603,992	3,019,960
193	Replace Circuit F-9 Underground Lines	103,023					103,023
194	Replace Circuit F-14 Underground Lines	103,023					103,023
195	Replace Burbank Station Distribution Getaways		154,535	404,535	-		559,070
197	Replace 69 kV and 34.5 kV Lines Due to Deterioration	104,509	104,509	104,509	104,509	104,509	522,545
198	Replace Deteriorated Overhead Electrical Dist. Lines	550,000	550,000	550,000	550,000	550,000	2,750,000
199	Replace Services	400,000	400,000	400,000	400,000	400,000	2,000,000
201	Underground Existing Overhead Electric Lines	412,075	412,075	412,075	412,075	412,075	2,060,374
202	Operation Network Replacement (Synchronous Optical Networking - SONET)		50,000	1,026,560			1,076,560
203	Replace Obsolete Equipment at Electric Substations	349,899	349,899	349,899	412,093	412,093	1,873,883
204	Transformer & Breaker Bushing Replacement		52,102	52,102	52,102		156,307
207	Replace Station Medium Voltage Oil/Air Circuit Breakers with Vacuum Circuit Bre	100,587	100,587	100,587	100,587	400,000	802,348
210	Replace Station High Voltage Oil Circuit Breakers - TBD	204,837	204,837	204,837	204,837	204,837	1,024,186
213	Replace Batteries & Charger at Hollywood Way Substation				86,512		86,512
214	Replace Batteries & Charger at Warner Substation			76,209			76,209
215	Replace Batteries & Charger at Golden State Substation	86,512					86,512
216	Replace Batteries & Charger at McCambridge Substation		76,209				76,209
217	Replace Batteries & Charger at TBD					100,000	100,000

Burbank Water and Power
Fiscal Year 2017-18 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)

	B	AE	AF	AG	AH	AI	AJ
1	Project	FY 17-18 Proposed	FY 18-19 Forecast	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	Total FY 2017/18 - 2021/22
219	Ground Grid Improvements				127,419	127,419	254,838
220	Distribution Substation Transformer Replacement				604,535		604,535
222	Reconfigure Golden State Transformers			625,395			625,395
228	Sub-Total	6,918,457	6,067,815	7,810,700	6,558,661	6,214,925	33,570,559
232							
233	Facility Renovations						
238	Roof Replacement Program	79,500	250,000	250,000	250,000	250,000	1,079,500
239	Delta Controls Software and EMS (Adm Building)	27,500					27,500
247	Facilities Painting Program	200,000	100,000	100,000	100,000	100,000	600,000
254	Sub-Total	307,000	350,000	350,000	350,000	350,000	1,707,000
255							
256	ONE Burbank						
257	ONE Burbank Network Infrastructure Expansion	250,000	250,000	250,000	250,000	250,000	1,250,000
258	Geographic Information System (GIS) Upgrades	-	-	-	50,000	-	50,000
259	Fiber Billing Scoping	50,000	-	-	-	-	50,000
260	GIS-Based Work Design Software (WFM)	-	50,000	-	-	-	50,000
261	Sub-Total	300,000	300,000	250,000	300,000	250,000	1,400,000
262							
263	Finance, Warehouse and Fleet Facility						
273	eBS Upgrade		25,000				25,000
275	Work Order Asset Management (WAM) Upgrade			1,500,000			1,500,000
276	Sub-Total	-	25,000	1,500,000	-	-	1,525,000
277							
278	Customer Service						
279	Meter Data Management System Upgrade and Update				360,000		360,000
282	Customer Information System Upgrade	250,000	-	1,753,023		250,000	2,253,023
283	Sub-Total	250,000	-	1,753,023	360,000	250,000	2,613,023
284							
285	Security						
286	OT Network Monitoring	167,400					167,400
287	BWP Campus Network Update 10G	301,053					301,053
288	BWP Campus Security	114,390					114,390
289	Sub-Total	582,843	-	-	-	-	582,843
295							
296	Water Fund's Share of Common Projects	(133,582)	(43,125)	(431,878)	(85,250)	(71,500)	(765,335)
298							
300	Grand Total Cash	24,043,104	12,352,373	15,040,490	9,945,753	9,559,136	70,940,855
301							
302	Aid In Construction (AIC)						
303	Build New Customer Transformer Stations, 750 kVA & Under	573,485	573,485	573,485	573,485	573,485	2,867,427
307	Build Service to Large Project Over 1 MVA	900,000	900,000	900,000	900,000	900,000	4,500,000
309	Relocation of Facilities for I-5 Improvement Project	100,000					100,000
310	Relocation of Facilities for Caltrans Burbank Bridge Replacement	2,000,000	2,000,000	707,728	500,000		5,207,728
312	Reconfigure 69 kV Lines at RSE for risk mitigation (AIC share)	50,000					50,000

Burbank Water and Power
Fiscal Year 2017-18 Proposed Budget
Electric Fund Capital Improvement Projects (CIP)

	B	AE	AF	AG	AH	AI	AJ
1	Project	FY 17-18 Proposed	FY 18-19 Forecast	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	Total FY 2017/18 - 2021/22
2							
314	Install Transformer Gas Monitor at RSE & Switching Stations (AIC Share)	-	-			89,919	89,919
315	Install Transformer Temperature Monitors at Lincoln & Valley (AIC share)			56,512			56,512
316	Install Transformer Temperature Monitors at Capon & Olive (AIC share)				56,512		56,512
317	Upgrade Relays for 69 kV Lines, Lincoln-Valley #1 (AIC share)	128,628					128,628
318	Upgrade Relays for 69 kV Lines, Lincoln-Valley #2 (AIC share)				128,628		128,628
319	Build Facilities for Avion Burbank Development	3,721,950					3,721,950
320	Upgrade 69 kV Lines - City Wide (AIC share)		104,535				104,535
324	Provide Fiber Optic Services to Customers City Wide	200,000	200,000	200,000	200,000	200,000	1,000,000
325	Install Fiber Optic Service to City Facilities	90,000	-	-	-	-	90,000
326	Sub-Total	7,764,063	3,778,020	2,437,725	2,358,625	1,763,404	18,101,838
327							
328	Total AIC	7,764,063	3,778,020	2,437,725	2,358,625	1,763,404	18,101,838
329							
330	Grand Total Electric Fund CIP Projects	31,807,167	16,130,393	17,478,215	12,304,378	11,322,540	89,042,693