

## Burbank Water and Power Fiscal Year 2018-19 Adopted Budget Electric Fund Capital Plan

	2018-19 Proposed	2019-20 Forecast	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	FY 2018-19 to FY 2022-23 Forecast
Power Supply Improvement Projects	2,510,000	1,350,000	100,000	100,000	100,000	4,160,000
Operations Technology	25,000	400,000	-	-	-	425,000
Distribution Expansion Projects	5,341,958	2,870,479	2,017,502	2,354,964	4,544,184	17,129,088
Distribution Replacement Projects	8,771,070	9,540,741	9,197,772	8,020,088	7,747,678	43,277,349
New Customer Projects/AIC	3,828,020	2,687,725	2,358,625	1,763,404	1,673,485	12,311,260
Facility Renovations	632,000	200,000	225,000	200,000	175,000	1,432,000
ONE Burbank	300,000	250,000	310,000	1,000,000	250,000	2,110,000
Finance, Warehouse and Fleet Facility	25,000	200,000	-	-	-	225,000
Customer Service	680,000	150,000	750,000	150,000	750,000	2,480,000
Water Fund's share of common projects	(149,055)	(110,750)	(119,625)	(41,750)	(113,875)	(535,055) (A)
<b>Total CIP</b>	<b>\$ 21,963,994</b>	<b>\$ 17,538,196</b>	<b>\$ 14,839,274</b>	<b>\$ 13,546,706</b>	<b>\$ 15,126,472</b>	<b>\$ 83,014,642</b>
Capital Outlay	902,000	920,040	938,441	957,210	976,354	4,694,044
Information Technology	39,825	374,256	50,284	67,043	60,808	592,215
Master Fleet Plan	514,920	1,894,548	2,472,985	1,413,270	1,648,095	7,943,818
<b>Total Capital Outlay</b>	<b>\$ 1,456,745</b>	<b>\$ 3,188,844</b>	<b>\$ 3,461,710</b>	<b>\$ 2,437,522</b>	<b>\$ 2,685,257</b>	<b>\$ 13,230,077</b>
<b>Grand Total for Electric CIP</b>	<b>\$ 23,420,739</b>	<b>\$ 20,727,039</b>	<b>\$ 18,300,983</b>	<b>\$ 15,984,229</b>	<b>\$ 17,811,729</b>	<b>\$ 96,244,719</b>

Note:  
(A) Includes 15% for Safety, 12.5% for Customer Service, and 11.5% for Operations Technology, Facilities, and Finance when applicable.

**Burbank Water and Power  
Fiscal Year 2018-19 Adopted Budget  
Electric Fund Capital Improvement Projects (CIP)**

	B	AF	AG	AH	AI	AJ	AK
1	Project	FY 18-19 Adopted	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	FY 22-23 Forecast	Total FY 2018/19 - 2022/23
2							
3							
4	<b>Power Supply Improvement Projects</b>						
14	SCADA VM Hardware	410,000					410,000
30	System Restoration Study		250,000				250,000
31	Advanced Distribution Management System	1,000,000					1,000,000
42	Pacific Northwest DC Intertie	1,100,000	1,100,000	100,000	100,000	100,000	2,500,000
43	<b>Sub-Total</b>	<b>2,510,000</b>	<b>1,350,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>4,160,000</b>
44							
45	<b>Operations Technology</b>						
46	Operational Reliability	25,000	400,000				425,000
51	<b>Sub-Total</b>	<b>25,000</b>	<b>400,000</b>	-	-	-	<b>425,000</b>
52							
53	<b>Distribution Expansion Projects</b>						
64	Upgrade Circuit M-11 Overhead Lines	364,000					364,000
69	Upgrade 34.5 kV Lines		104,535				104,535
73	Upgrade 69 kV Lines TBD (Dept share)	104,535					104,535
77	Voltage Corrections	200,000	200,000	150,000	150,000	150,000	850,000
81	Upgrade Relays for 69 kV Lines, Lincoln-Valley #2			128,628			128,628
82	Replace GE Relays on 69kV Lines TBD (Dept Share)		250,000				250,000
84	Upgrade Relays for 34 kV Lines, Pacific-Valley		128,628				128,628
85	Upgrade Relays for 34 kV Lines, Lincoln-Pacific		128,628				128,628
86	Upgrade Relays for 34 kV Lines, Town-Flower		258,163				258,163
87	Upgrade Relays for 34 kV Lines, Victory-Valley #1	258,163					258,163
88	Upgrade Relays for 34 kV Lines, Winona-Lincoln		258,163				258,163
90	Upgrade Voltage Regulator Controllers at Town Substation	210,000					210,000
91	Upgrade Voltage Regulator Controllers at McCambridge Substation		182,558				182,558
92	Upgrade Voltage Regulator Controllers at Winona Substation			203,163			203,163
93	Upgrade Voltage Regulator Controllers at Flower Substation				187,558		187,558
94	Upgrade Voltage Regulator Controllers at Naomi Substation				177,256		177,256
95	Voltage Regulator Replacements					200,000	200,000
100	Upgrade Station Transformer Relays at Keystone & Warner		308,991				308,991
101	Upgrade Station Transformer Relays at Naomi			308,991			308,991
105	Install Transformer Temperature Monitors at San Jose & Keystone	113,023					113,023
106	Install Transformer Temperature Monitors at Lincoln & Valley (dept share)		56,512				56,512
107	Install Transformer Temperature Monitors at Capon & Olive (dept share)			56,512			56,512
108	Install Transformer Temperature Monitors at Hollywood Way and Warner					115,000	115,000
109	Install Transformer Gas Monitor at RSE & Switching Stations (Dept Share)				89,919		89,919
112	Install Transformer Gas Monitor at Winona Station	102,721					102,721
113	Install Transformer Gas Monitor at Clybourn, Town, & San Jose Stations		118,326				118,326
114	Install Transformer Gas Monitor at Naomi & Keystone Stations			102,721			102,721
115	Install Transformer Gas Monitor at Lincoln and Valley					125,000	125,000
120	Data Time Synchronization & Centralized Digital Fault Recording	220,000					220,000
122	Station Capacitor Bank Upgrade at Clybourn	203,628					203,628

**Burbank Water and Power  
Fiscal Year 2018-19 Adopted Budget  
Electric Fund Capital Improvement Projects (CIP)**

	B	AF	AG	AH	AI	AJ	AK
1	Project	FY 18-19 Adopted	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	FY 22-23 Forecast	Total FY 2018/19 - 2022/23
2							
3							
123	Station Capacitor Bank Upgrade at Town		325,744				325,744
124	Station Capacitor Bank Upgrade at Naomi			325,744			325,744
128	Upgrade Bus Differential Relays at Winona & NBC	257,558					257,558
136	Ontario Distributing Station	923,776				-	923,776
138	Ontario Distributing Station - Distribution lines Build-out	805,333				-	805,333
139	Media District 12kV Capacity					3,000,000	3,000,000
142	Switchgear Remote Racking at Keystone & Burbank	131,814					131,814
145	Station Service Transformer Upgrade at Town	52,116					52,116
148	DC Panel Upgrades Flower and McCambridge					100,000	100,000
149	Automatic Bus Transfer Scheme at Burbank & Hollywood Way	156,047					156,047
150	Automatic Bus Transfer Scheme at Clybourn & Town		156,047				156,047
151	Automatic Bus Transfer Scheme at Naomi & San Jose			156,047			156,047
152	Automatic Bus Transfer Scheme at Golden State & Keystone				156,047		156,047
155	Site Restoration of the Alameda/Old Hollywood Way Substation	312,750					312,750
160	Upgrade Geographic Information System (GIS)			251,512			251,512
161	Implement New Gridview Modules	50,000					50,000
163	Keystone Station Feeder Relay Upgrades				500,000		500,000
164	Burbank Primary Feeder Relays and MicroSCADA Replacement				500,000		500,000
165	Station RTU Replacement				300,000	600,000	900,000
170	Electric Vehicle Charging Program	716,494	204,184	204,184	204,184	204,184	1,533,232
174	Fiber Optic Infrastructure Expansion	160,000	190,000	130,000	90,000	50,000	620,000
177	<b>Sub-Total</b>	<b>5,341,958</b>	<b>2,870,479</b>	<b>2,017,502</b>	<b>2,354,964</b>	<b>4,544,184</b>	<b>17,129,088</b>
178							
179	<b>Distribution Replacement Projects</b>						
185	4 kV to 12 kV Conversion of Circuit N-17 & N-13 to HW-11	1,500,000					1,500,000
187	4 kV to 12 kV Conversion of Circuit N-21	400,000					400,000
188	4 kV to 12 kV Conversion of Circuit V-7	500,000	4,000,000	300,000			4,800,000
189	4 kV to 12 kV Conversion of Circuit N-15	1,600,000					1,600,000
190	4 kV to 12 kV Conversion of Circuit V-12			3,700,000	300,000		4,000,000
191	4 kV to 12 kV Conversion of Circuit V-9				3,700,000	300,000	4,000,000
192	4 kV to 12 kV Conversion of Circuit V-2					2,100,000	2,100,000
193	4 kV to 12 kV Conversion of Circuit V-3					1,600,000	1,600,000
195	Replace Deteriorated Underground Electrical Dist. Lines	603,992	603,992	603,992	603,992	603,992	3,019,960
203	Replace Burbank Station Distribution Getaways	154,535		404,535			559,070
204	Replace Circuit BB-15 Underground Lines			100,000			100,000
205	Replace Circuit BB-3 Underground Lines				200,000		200,000
207	Restore condition of padmount transformers in stock	50,000					50,000
208	Replace 69 kV and 34.5 kV Lines Due to Deterioration	104,509	104,509	104,509	104,509	104,509	522,545
209	Replace Deteriorated Overhead Electrical Dist. Lines	2,000,000	1,500,000	1,500,000	1,000,000	1,000,000	7,000,000
210	Replace Services	450,000	450,000	450,000	450,000	450,000	2,250,000
212	Underground Existing Overhead Electric Lines	412,075	412,075	412,075	412,075	412,075	2,060,374
213	Operation Network Replacement (Synchronous Optical Networking - SONET)	50,000	1,026,560				1,076,560

**Burbank Water and Power  
Fiscal Year 2018-19 Adopted Budget  
Electric Fund Capital Improvement Projects (CIP)**

	B	AF	AG	AH	AI	AJ	AK
1	Project	FY 18-19 Adopted	FY 19-20 Forecast	FY 20-21 Forecast	FY 21-22 Forecast	FY 22-23 Forecast	Total FY 2018/19 - 2022/23
2							
3							
215	Replace Obsolete Equipment at Electric Substations	349,899	349,899	412,093	412,093	415,000	1,938,984
216	Transformer & Breaker Bushing Replacement	52,102	52,102	52,102		52,102	208,409
219	Replace Station Medium Voltage Oil/Air Circuit Breakers with Vacuum Circuit Breakers at TBD	130,000	130,000	130,000	400,000	400,000	1,190,000
222	Replace Station High Voltage Oil Circuit Breakers - TBD	210,000	210,000	210,000	210,000	210,000	1,050,000
225	Replace Batteries & Charger at Hollywood Way Substation			86,512			86,512
226	Replace Batteries & Charger at Warner Substation		76,209				76,209
228	Replace Batteries & Charger at McCambridge Substation	76,209					76,209
229	Replace Batteries & Charger at TBD				100,000	100,000	200,000
231	Ground Grid Improvements	127,749		127,419	127,419		382,587
232	Distribution Substation Transformer Replacement			604,535			604,535
234	Reconfigure Golden State Transformers		625,395				625,395
240	<b>Sub-Total</b>	<b>8,771,070</b>	<b>9,540,741</b>	<b>9,197,772</b>	<b>8,020,088</b>	<b>7,747,678</b>	<b>43,277,349</b>
241							
242	<b>Aid In Construction (AIC)</b>						
243	Build New Customer Transformer Stations, 750 kVA & Under	573,485	573,485	573,485	573,485	573,485	2,867,426
247	Build Service to Large Project Over 1 MVA	900,000	900,000	900,000	900,000	900,000	4,500,000
250	Relocation of Facilities for Caltrans Burbank Bridge Replacement	2,000,000	707,728	500,000			3,207,728
255	Install Transformer Gas Monitor at RSE & Switching Stations (AIC Share)				89,919		89,919
256	Install Transformer Temperature Monitors at Lincoln & Valley (AIC share)		56,512				56,512
257	Install Transformer Temperature Monitors at Capon & Olive (AIC share)			56,512			56,512
259	Upgrade Relays for 69 kV Lines, Lincoln-Valley #2 (AIC share)			128,628			128,628
260	Replace GE Relays AIC Share		250,000				250,000
262	Upgrade 69 kV Lines - City Wide (AIC share)	104,535					104,535
266	Provide Fiber Optic Services to Customers City Wide	200,000	200,000	200,000	200,000	200,000	1,000,000
267	Install Fiber Optic Service to City Facilities	50,000					50,000
268	<b>Sub-Total</b>	<b>3,828,020</b>	<b>2,687,725</b>	<b>2,358,625</b>	<b>1,763,404</b>	<b>1,673,485</b>	<b>12,311,260</b>
269							
270	<b>Electric Total</b>	<b>17,531,049</b>	<b>14,708,946</b>	<b>13,243,899</b>	<b>11,848,456</b>	<b>13,715,347</b>	<b>71,047,697</b>
271							
272	<b>Facility Renovations</b>						
279	Roof Replacement Program	-	150,000	125,000	100,000	75,000	450,000
284	Work Station Replacement Program	307,000					307,000
286	HVAC Upgrade Study & Project for ECC	200,000					200,000
287	Facilities Painting Program	-	50,000	100,000	100,000	100,000	350,000
293	Trading and Scheduling Room	125,000					125,000
295	<b>Sub-Total</b>	<b>632,000</b>	<b>200,000</b>	<b>225,000</b>	<b>200,000</b>	<b>175,000</b>	<b>1,432,000</b>
296							
297	<b>ONE Burbank</b>						
298	ONE Burbank Network Infrastructure Expansion	250,000	250,000	250,000	250,000	250,000	1,250,000
299	Geographic Information System (GIS) Upgrades			50,000			50,000
301	GIS-Based Work Design Software (WFM)	50,000					50,000
302	ESSN Network Infrastructure Replacement			10,000	750,000		760,000

**Burbank Water and Power  
Fiscal Year 2018-19 Adopted Budget  
Electric Fund Capital Improvement Projects (CIP)**

	B	AF	AG	AH	AI	AJ	AK
1	<b>Project</b>	<b>FY 18-19</b>	<b>FY 19-20</b>	<b>FY 20-21</b>	<b>FY 21-22</b>	<b>FY 22-23</b>	<b>Total</b>
2		<b>Adopted</b>	<b>Forecast</b>	<b>Forecast</b>	<b>Forecast</b>	<b>Forecast</b>	<b>FY 2018/19 - 2022/23</b>
3							
303	<b>Sub-Total</b>	<b>300,000</b>	<b>250,000</b>	<b>310,000</b>	<b>1,000,000</b>	<b>250,000</b>	<b>2,110,000</b>
304							
305	<b>Finance, Warehouse and Fleet Facility</b>						
309	Auto Reordering		200,000				200,000
319	Hyperion Enterprise Budgeting and Reporting Tool Study	25,000					25,000
322	<b>Sub-Total</b>	<b>25,000</b>	<b>200,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>225,000</b>
323							
324	<b>Customer Service</b>						
325	Meter Data Management System Upgrade and Update			250,000		250,000	500,000
327	Customer Enhancements			250,000		250,000	500,000
328	IVR Upgrade	430,000					430,000
329	Customer Web Portal		150,000		150,000		300,000
330	Customer Information System Upgrade	250,000		250,000		250,000	750,000
331	<b>Sub-Total</b>	<b>680,000</b>	<b>150,000</b>	<b>750,000</b>	<b>150,000</b>	<b>750,000</b>	<b>2,480,000</b>
332							
344	Water Fund's Share of Common Projects	(149,055)	(110,750)	(119,625)	(41,750)	(113,875)	(535,055)
347							
348	<b>Grand Total Electric Fund CIP Projects</b>	<b>21,963,994</b>	<b>17,538,196</b>	<b>14,839,274</b>	<b>13,546,706</b>	<b>15,126,472</b>	<b>83,014,642</b>