

CITY OF BURBANK **BURBANK WATER AND POWER** STAFF REPORT

DATE:

December 5, 2019

TO:

FROM:

Jorge Somoano, General Manager, BWP

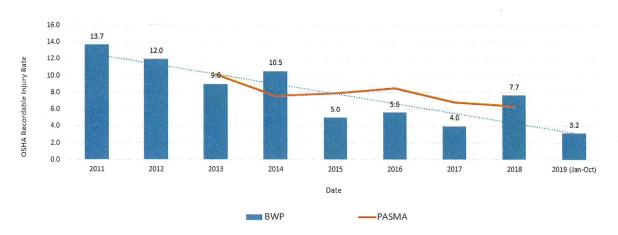
SUBJECT:

*Please note that changes from last month's report are in BOLD

SAFETY

For the month of October, BWP experienced zero OSHA recordable injuries; however, two previous first aid injuries were reclassified as OSHA recordable as a result of additional medical treatment. BWP's year to date (Jan - Oct) OSHA recordable rate increased from 2.9 in September to 3.2 for the end of October.





OSHA Recordable Injury Rate = No. of recordable cases per 100 full time employees. PASMA - Public Agency Safety Management Association (Utilities only Data) 2019 Data = 12 month rolling average

Water Estimated Financial Results

For the month of October, Potable Water usage was 2% (10 million gallons) higher than budgeted and Potable Water Revenues were \$105,000 higher than budgeted. Recycled Water usage was 9% (9 million gallons) higher than budgeted and Recycled Water Revenues were \$7,000 lower than budgeted. October Water Supply Expenses were \$39,000 lower than budgeted. October's Gross Margin was \$131,000 higher than budgeted. Net Income was \$349,000, which was \$131,000 higher than budgeted.

October fiscal-year-to-date (FYTD) Potable Water usage was 3% (73 million gallons) lower than budgeted. FYTD October Potable Water Revenues were \$175,000 higher than budgeted. FYTD Recycled Water usage was 1% (4 million gallons) higher than budgeted and Recycled Water Revenues were \$3,000 lower than budgeted. FYTD Water Supply Expenses were \$297,000 lower than budgeted. The FYTD October Gross Margin was \$338,000 better than budgeted. Operating Expenses were \$682,000 lower than budgeted. Net Income was \$1,814,000, which was \$1,012,000 better than budgeted.

Electric Estimated Financial Results

For the month of October, electric loads were 9% lower than budget. Retail Sales were \$1,055,000 lower than budgeted. October Power Supply Expenses were \$682,000 lower than budgeted primarily due to lower energy prices and economic dispatch (the managing and optimizing of resources to meet system load). October's Wholesale Margin was \$5,000 lower than budgeted. October's Gross Margin was \$557,000 lower than budgeted. Net Income was \$1,012,000, which was \$557,000 lower than budgeted.

FYTD October electric loads were 5% lower than budget. Approximately 1% of this variance can be attributed to delays in the LADWP tunneling project. Note that NEL was conservatively budgeted at approximately the 60th percentile (all load/weather simulations calculated, 60% had NEL lower than the budgeted amount) of simulated load scenarios. Retail Sales were \$3,055,000 lower than budgeted. FYTD Power Supply Expenses were \$4,366,000 lower than budgeted primarily due to lower energy prices and economic dispatch (the managing and optimizing of resources to meet system load), and lower than planned retail load. FYTD Wholesale Margin was \$265,000 lower than budgeted. FYTD Gross Margin was \$513,000 better than budgeted. October FYTD Operating Expenses were \$1,460,000 lower than budgeted. Net Income was \$4,664,000, which was \$2,107,000 better than budgeted.

WATER DIVISION

State Water Project Update

On June 20, 2019, the Department of Water Resources (DWR) increased the State Water Project (SWP) Allocation Table A amounts from 70% to 75%. This is the final allocation for the calendar year.

Burbank's Water Use

The table below shows water use in Burbank during October 2019 compared to October 2018 measured in gallons per capita per day (gpcd). Also shown is a comparison of Burbank's water use based on a 12-month rolling average.

	Average Monthly Use	Rolling 12-Month Average
October 2018	143 gpcd	138 gpcd
October 2019	154 gpcd	132 gpcd

These figures show annual water use is well below the target average use of 157 gpcd that must be met by the year 2020.

Burbank Operating Unit (BOU) Water Production

The table below provides the operational data for the BOU for the rolling quarter of August through October. The contract operator performed weekly and monthly sampling for the treatment plant and wells.

	Capacity Factor	Average Flow Rate (FY Total)
Aug-19	71.13%	6,402 gpm
Sep-19	76.3%	6,867 gpm
Oct-19	88.35%	7,952 gpm

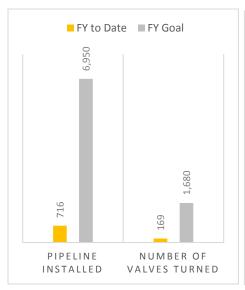
Project Updates

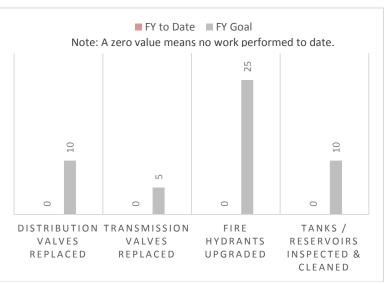
Due to the bountiful 2019 water year, MWD added excess water supply to its storage facilities. The available water exceeded MWD's capacity to place water into its storage facilities so MWD authorized use from the previously created Cyclic Storage Program to allow Member Agencies to store water in their groundwater basins and then pay for the water later.

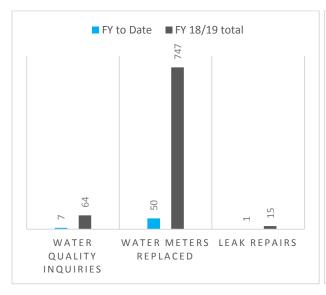
Burbank agreed to spread up to 14,000 acre-feet of Cyclic Storage Water by the end of the 2019 calendar year. The spreading water was shut off on August 22 in order for the Los Angeles County Flood Control District to perform annual maintenance activities. It was returned to active service on October 2. During the month of October 2,133.3 acre-feet of water was spread, bringing the total 2019 water spread to 9,020 acre-feet.

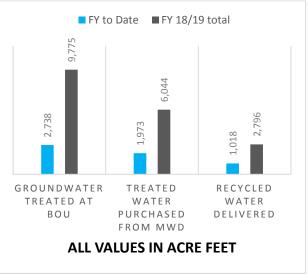
Key Performance Indicators

The graphs below illustrate the progress the Water Division has made on key performance measures.









Leak Alert Notifications

During the Fall of 2009, BWP began installing an Automated Metering Infrastructure (AMI) System by Itron. The system consists of endpoints that connect directly to the meter to get the meter read. The water use was transmitted by radio from the endpoints located in the meter box and received by 10 collectors stationed throughout the City. The data was "backhauled" or bundled using the Tropos radio system and delivered to database servers that accepted and processed the meter data. Full deployment of the system (approximately 26,000 endpoints) was completed in 18 months.

Benefits of AMI technology allow data to be collected rapidly and frequently and can be analyzed to find higher than normal usage and alert customers of leaks. BWP began providing Leak Alert service to residents who registered to receive notifications. This service, Water Smart, works by receiving hourly water usage from the meter and analyzes this data to determine if a leak might be present based on continuous usage. Since 2015, we have provided 11,756 leak alerts to customers. Unfortunately, a high volume of communication modules are not working reliably and replacement units are no longer produced.

As of October 2019, 2,749 communication modules are not working properly out of 26,984 meters (about 9 %). We notified 976 customers who participate in the Leak Alert Program that the failure of these communication modules prevents the sending of Leak Alert Notifications.

San Fernando and Grismer

This broken 24" gate valve was removed after a new 24" Butterfly valve was installed. This is part of our annual valve replacement program where we replace five transmission valves every year.





ELECTRIC RELIABILITY

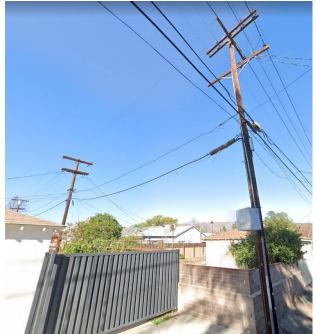
In October 2019, BWP did not experience any sustained feeder outages. In the past 12 months, automatic reclosing has reduced customer outage time by approximately 1,553,929 customer minutes.

Reliability Measurement	November 2017- October 2018	November 2018 - October 2019
Average Outages Per Year (SAIFI)	0.3122	0.4082
Average Outage Duration (CAIDI)	39.98 minutes	34.56 minutes
Average Service Availability	99.998%	99.997%
Average Momentary Outages Per Year (MAIFI)	0.2346	0.3711
No. of Sustained Feeder Outages	9	11
No. of Sustained Outages by Mylar Balloons	3	2
No. of Sustained Outages by Animals	0	0
No. of Sustained Outages by Palm Fronds	1	2

PROJECT UPDATES

N-17 & 18 4-12kV Conversion

12kV rebuild work is complete. A total of 51 poles and accessories, 12 overhead transformers, over 8,100 feet of overhead primary conductor, and over 6,200 feet of overhead secondary conductor were installed. Actual 12kV conversion of feeders N-15, N-17, and N-18 is estimated to start by early December 2019.

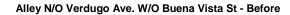




Property line E/O Catalina St N/O Verdugo Ave - Before

Property line E/O Catalina St N/O Verdugo Ave - After







Alley N/O Verdugo Ave. W/O Buena Vista St. - After

STREET LIGHTING

LED Replacement Program

In accordance with the Street Lighting Master Plan, BWP is replacing high-pressure sodium (HPS) streetlight luminaires with light-emitting diode (LED) luminaires. Replacement is carried out on a maintenance basis, and LEDs are installed daily as the HPS luminaires burn out. The LED replacements consume approximately 60% less energy. To date, 60.87% of the total streetlight luminaires have been converted to LEDs, which translates to an annualized energy savings of 3,317MWh or a 35.79% reduction in energy consumption. LED conversions have also reduced evening load by 757kW, which shortens the "neck of the duck curve" and reduces the amount of energy generation that BWP needs.

CUSTOMER SERVICE

Customer Service Operations

Customer Service is in the process of hiring six part-time Customer Service Representatives. We anticipate them onboarding by the end of January 2020. These hires will fill vacancies and allow Customer Service the flexibility and capacity to meet service levels.

Call volume levels are now at or below the levels before going live with the OAM. Through customer feedback, BWP is looking for ways to make improvements that will be part of the next phase of the OAM project, including usage data and outage notifications.

Call Types	% of Calls
Balance	33%
Account/PIN #	9%
Disconnect/Reconnect	7%
Payment Extension	5%
Other	5%

	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	% Inc/Dec
Call Volume	7227	5740	6310	5029	5507	5417	4675	5374	14%

Online Account Manager

The adoption of the Online Account Manager (OAM) continues to be over 50% of all active accounts. Of all registered accounts, close to 90% are paperless customers helping BWP reduce costs and reduce carbon emissions. BWP will continue its efforts to drive Customers to the OAM, paperless, and auto pay. These initiatives will continue to drive

down costs. BWP's second milestone is to have 80% of all active accounts registered on the OAM by 2021. **Below is the chart outlining activity for the Online Account Manager:**

	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Total	% of Total*
Enrollments	18,498	6,317	3,052	1,742	1,294	1,126	1,002	824	33,855	61%
Paperless	17,047	5,704	3,045	1,729	1,288	1,119	995	823	31,750	57%
Autopay	2,354	2,376	1,170	985	614	559	462	420	13,546	26%

^{*} Percent as compared to all active BWP accounts.

Electric Vehicle (EV) Charging Program

Forty-five public EV charging ports are installed in Burbank, including 2 DC Fast Chargers and 18 curbside chargers. As of June 1, 2019, Time of Use (TOU) pricing for public EV charging is \$0.1736 per kilowatt-hour (kWh) for Level 1 and Level 2 off-peak, and \$.3069 per kWh on-peak. For the DC Fast Chargers, the charging rate is \$0.2817 per kWh off-peak and \$0.4980 per kWh on-peak. At this time, six Level 2 charging ports have been unable to be updated to the summer pricing. This is due to software issues with the chargers.

Month of usage	Chargers Available	Usage in kWh	Gross Revenue	GHG reduced	kWh/ Station/	% Peak Sessions	Charging Occupancy
usaye	Available	III KVVII	Revenue	in kg	Day	063310113	Occupancy
Oct 2019	35	16,847	\$3,175	7,706	13	22%	14%
Sep 2019	34	15,978	\$3,099	6,711	12	24%	16%
Aug 2019	36	17,738	\$3,638	7,450	13	24%	14%
Jul 2019	41	19,804	\$3,765	8,318	15	22%	16%
Jun 2019	42	24,374	\$4,303	10,237	19	21%	23%
May 2019	42	25,756	\$4,783	10,818	19	21%	22%
Apr 2019	42	26,501	\$4,981	11,131	20	21%	20%
Mar 2019	42	24,810	\$4,507	10,420	18	20%	17%
Feb 2019 ¹	44	20,127	\$3,277	8,453	17	23%	17%
Jan 2019	44	20,706	\$3,511	8,696	16	22%	18%
Dec 2018	45	22,889	\$3,991	9,613	18	21%	19%
Nov 2018 ²	45	22,145	\$3,879	9,301	18	20%	20%
Oct 2018 ³	45	23,141	\$3,957	9,719	18	20%	21%
Sep 2018	45	18,592	\$3,665	7,809	17	18%	20%
Aug 2018	45	18,613	\$3,757	7,818	23	21%	23%

¹ Includes four new Ontario Substation curbside chargers installed mid-February.

Ten charging ports were out of service during October. Repairs on the Chargepoint Level 2 chargers are projected for November, and the curbside chargers are projected to be repaired/replaced in December. The DC Fast Charger at the Lakeside Shopping Center was placed back in service as of October 16.

² Includes the new DC Fast Charger and the removal of 2 chargers due to the Burbank Town Center project.

³ Includes 16 new public Level 2 chargers installed mid-September.

Port Location	# of Ports	Out of Service Date	Issue	Expected Back in Service Date
133 E. Orange Grove	1	19-Feb	Internal failure	19-Nov
2034 N. Hollywood Way	2	19-Mar	Cable retractor failure	19-Nov
1113 W. Alameda Ave.	2	19-Aug	Cable retractor failure	19-Nov
520 N. Glenoaks Blvd.	1	19-Aug	Cable retractor failure	19-Nov
533 S. Glenoaks Blvd	2	19-Aug	Cable retractor failure	19-Dec
340 N. Buena Vista St.	1	19-Sep	Cable retractor failure	19-Dec
2116 Glenoaks Blvd.	1	19-Oct	Cable retractor failure	19-Dec

Rooftop Solar

The table below tracks the total number and capacity of installed customer-owned rooftop solar photovoltaic systems in Burbank.

Month	Number of Solar Systems Installed This Month	Number of Solar Systems Installed FYTD	Total Solar Systems in Burbank	Total Solar Kilowatts
Oct 2019	9	30	829	8,189
Sep 2019	5	21	820	8,111
Aug 2019	10	16	815	8,073
Jul 2019*	6	6	805	8,012
Jun 2019	12	100	799	7,962
May 2019	10	88	787	7,889
Apr 2019	8	78	777	7,833
Mar 2019	11	70	769	7,788
Feb 2019	5	59	758	7,707
Jan 2019	15	54	753	7,677
Dec 2018	10	39	738	7,530
Nov 2018	6	29	728	7,375
Oct 2018	9	23	722	7,351
Sep 2018	5	14	713	7,289
Aug 2018	5	9	708	7,256

^{*} Start of new fiscal year.

TECHNOLOGY

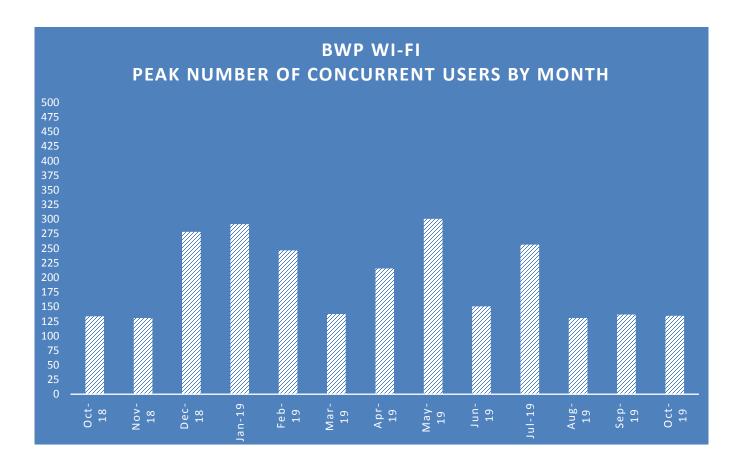
Broadband Services (ONE Burbank)

	October 2019	Revenues for	FYTD 2019-20	FYTD Budget
	New Orders	October 2019	Revenues	
Lit	2	\$112,938	\$455,403	\$513,333
Dark	3	\$235,065	\$812,235	\$770,000
Total	5	\$348,003	\$1,267,638	\$1,283,333

BWP WiFi

On August 17, 2015, BWP WiFi launched throughout the City of Burbank as a free citywide wireless community broadband service.

The table below reports the number of users that are active and communicating to the internet (email, browsing, streaming, etc.)



Cyber Security Update - October 2019

BWP is currently implementing technology improvements which will impact the way cyber security data is gathered and metrics are reported going forward. BWP will make every effort to provide accurate and relevant data within these reports, however, as necessary technology improvements are required, these reports and the data referenced within them may change.

POWER SUPPLY

BWP SYSTEM OPERATIONS:

The maximum load for October 2019 was 210.9 MW at 4:08 PM on Thursday, October 24, and the minimum load was 81 MW at 4:23 AM on Sunday, October 13.



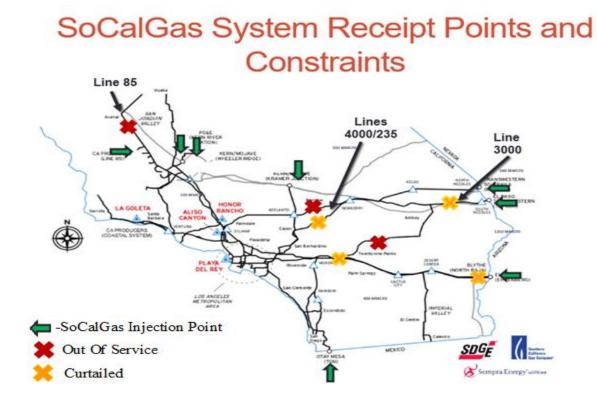
Minimum load values corrected for Sept & Dec 2018.

YEAR	MAX LOAD	MAX DATE
2018	306.3 MW	06-Jul-18
2018	300.3 10100	16:41:28
2017	322.1 MW	31-Aug-17
2017	322.1 10100	16:02:52
2016	2016 308.52 MW	20-Jun-16
2016	306.32 10100	16:46:20
2015	306.23 MW	09-Sep-15
2015	300.23 10100	15:42:00
2014	316.68 MW	16-Sep-14
2014	210.09 14144	15:52:04

The Burbank power system did not experience abnormal weather or natural gas supply issues for October 2019.

Southern California continues to experience natural gas reliability and affordability challenges because of supply and demand mismatches. SoCal Gas' system capacity and supply are primarily a function of two components: (1) transmission pipelines, which bring gas into and then transport it throughout the system; and (2) underground natural gas storage connected to transmission pipelines near system load. While one component of the system's limited supply is the transmission pipeline reductions and outages, the other critical component is storage operating constraints from the CPUC restricting the use of the Aliso Canyon Storage Facility. The current effective withdrawal protocol is restrictive but is less restrictive than the previous protocol, in that Aliso Canyon was only allowed to be withdrawn from if curtailment was imminent, but now can occur under less acute circumstances. This likely reduces the number and severity of single day gas price swings in the SoCal Gas system.

The CPUC continues to be concerned about the status of the SoCalGas storage inventory, system operations, and ability to provide natural gas this winter. SoCal Gas is 2.5 Bcf behind its estimates on filling its non-Aliso Canyon storage facilities. On September 17 the CPUC sent SoCal Gas a letter ordering SoCal Gas to take immediate actions to increase injections at all available storage facilities.



Line 235-2

Line 235-2 (largely a 1957 vintage pipeline) has been out of service for assessment and remediation since a rupture occurred on the pipeline on October 1, 2017. SoCal Gas has remediated and repaired the ruptured segment, but, as detailed below, SoCal Gas has also initiated additional work to assess, analyze, and repair other segments on Line 235-2 that are of the same "family" of pipeline. SoCalGas reports that it has found multiple additional leaks in the pipeline. Line 235-2 returned to service on October 15 at a reduced pressure. The in-line inspection of line 235-2 was scheduled to be completed on November 1. SoCalGas has not provided an update on the status on line 235-2 since October 22.

Line 4000

Following the Line 235-2 rupture, SoCal Gas reduced the pressure of Line 4000 (largely a 1960 vintage pipeline) because it is in the same "family" of pipelines as Line 235-2. SoCal Gas lowered the pressure to increase the factor of safety on the pipeline until SoCal Gas can conduct further analysis of Line 4000 based on what is learned from Line 235-2. In addition, this increased safety margin reduced the safety risk to employees working on Line 235-2, which is in close proximity to Line 4000 for the first 5-6 miles. Line 4000 will continue operating at reduced pressure until testing and maintenance work is complete to mitigate potential pipeline anomalies, like those found on Line 235-2.

Line 3000

Line 3000 (largely a 1957 vintage pipeline) returned to service at reduced operating pressure in September 2018 allowing receipts from the Topock area. The full scope of the Line 3000 project to date included more than 10 miles of non-consecutive pipeline replacements, coating remediation, and cathodic protection insulator installations at more than 246 job sites that span approximately 125 miles, traversing challenging terrain.

ELECTRICITY GENERATION:

BWP Generating Facilities

Unit	Availability	Operating Hrs	MWH (Net)	NO _x (lbs)	Starts
Olive 1	0%	0	0	0	0
Olive 2	0%	0	0	0	0
Lake 1	100%	36	1,264	298	7
MPP	100%	744	141,275	5,511	0

Olive 1 and 2 remained in dry storage, with a 120-day notice required to restart. Olive 1 and 2 have been in dry storage since 2011 and 2012, respectively. Lake One was placed online seven times during the month of October.

Magnolia Power Project (MPP)

	October	FYTD	YTD
Availability	100%	97%	96%
Unit Capacity Factor (240 MW)	79%	77%	75%

There were no plant trips or other outages at MPP during October 2019.

Tieton Hydropower Project (Tieton)

Tieton's annual generation season began on March 22 with limited water flow provided by the United States Bureau of Reclamation (USBR), which carried out "fish pulse" operations designed to encourage upward spawning migration of spring salmon. Fish pulsing was conducted until March 27 when water flow was reduced and generation was no longer possible until later in April, when it commenced again.

Tieton generated 3,086 MWhs in October, which is 13.6 percent above the average of 2,716 MWhs for October. Generation ended October 19 and maintenance work has begun.

ENVIRONMENTAL

Air Quality

On June 28, BWP submitted two application packages to the South Coast Air Quality Management District (SCAQMD) in order to renew the existing Title V Operating Permits for Lake One and for MPP. These applications are currently under review by the SCAQMD. Once the SCAQMD completes its review and issues draft permits, the draft permits will go to the Environmental Protection Agency (EPA) for a 45-day review period. After the 45-day review period is completed, final permits will be issued to BWP for Lake One and MPP to continue operations. The permits will cover another five-year operating period for each facility.

On July 17, another application package was submitted to the SCAQMD to revise MPP's Title V Operating Permit. This application is to approve and include general electric upgrades to the combustion turbine, allowing MPP to operate at a lower minimum load output (MW) while still complying with existing air quality requirements. Upgrades cannot be installed until a revised permit is approved and this process is being managed independently of the five-year permit renewal. This application is currently under review by the SCAQMD and will go to the EPA for a 45-day review period once the SCAQMD issues a draft permit. After the 45-day period is complete, a final permit will be issued.

PROJECT UPDATES:

Power Resources

Transmission Update

Negotiations with LADWP, for several existing Transmission Service Agreements, including those associated with Hoover Dam and IPP generation resources are ongoing. A one-year extension of the existing Hoover Transmission Service Agreement was approved by consent by City Council on August 13.

Integrated Resource Planning

BWP's 2019 Integrated Resource Plan (IRP) was adopted by the City Council on December 11, 2018 in accordance with the requirements of Senate Bill 350. In conjunction with its adoption of the 2019 IRP, Council also established 1) a SB350-compliant process to update the BWP IRP at least every five years and 2) an aspirational goal to achieve a 100% greenhouse gas-free power supply for Burbank by 2040 or sooner, consistent with reliability and affordability.

Pursuant to SB350, BWP filed the 2019 IRP with the California Energy Commission (CEC) on April 2, 2019, in advance of the April 30 deadline. The CEC is required to make two separate findings on IRPs: first, that the IRP is complete (i.e., all required components were included) and second, that the IRP is consistent with the requirements of SB350. The CEC confirmed that BWP's 2019 IRP is complete on May 14, 2019. On July 29, the Executive Director of the CEC filed a determination finding that BWP's 2019 IRP to be consistent with the requirements of SB350. At the CEC's November 13, 2019 Business Meeting, the Commission passed a motion, 4-0, to accept BWP's 2019 IRP, along with three other IRPs up for consideration. This action by the CEC formally completes BWP's 2019 IRP filing process.

Intermountain Power Project (Delta, UT) Renewal Progress

On June 20, the BWP Board voted 7-0 to recommend that City Council 1) authorize and direct the BWP General Manager to reduce Burbank's participation in the renewal of the Intermountain Power Project from 35 megawatts (MW) to 28 MW (a 20% reduction) and 2) approve and authorize the BWP General Manager to execute each of the Entitlement Assignment Agreement (Southern Transmission System) and the Entitlement Assignment Agreement (Northern Transmission System) together with all ancillary documents necessary to effectuate the foregoing. On July 23, Council approved these recommendations on a vote of 4-1.

BWP then informed the Intermountain Power Agency (IPA) and LADWP, in its capacity as IPP Operating Agent, of BWP's decision to participate in the repowering project at a reduced level, in advance of the August 3, 2019 deadline.

The Entitlement Assignment Agreements are pending approval by LADWP's governing bodies.

Power Generation

Landfill Gas to Energy Project

This project remains on schedule and within budget. The City issued building permits, and construction has begun. Excavation for installation of underground electrical conduits is complete, and concrete pours are pending. BWP witnessed the factory acceptance test of the microturbine package by Capstone, which is now ready for shipment to the site. Testing and shipment of the gas-conditioning skid by Unison is pending.

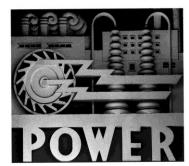


BWP's Sean Kigerl, Lincoln Bleveans, and Ron Maxwell attended acceptance testing at Capstone's manufacturing facility in Van Nuys, CA.

Burbank Water and Power













Estimated Financial Report October-19

Burbank Water and Power Electric Fund (496)

Estimated Statement of Changes in Net Assets (1) (2) (5) MTD and FYTD October 2019

(\$ in 000's except MWh Sales)

MTD ′ 19-20	MTD Oct-19 Budget	\$ Variance ⁽²⁾	% Variance		FYTD FY 19-20	FYTD Oct-19 Budget	\$ Variance ⁽²⁾	% Variance
90,470	99,416	(8,946)	(9%) ^(a)	NEL MWh	417,179	440,502	(23,323)	(5%) ^(A)
				Retail				
\$ 14,036	\$ 15,091	\$ (1,055)	(7%)	Retail Sales	\$ 63,522	\$ 66,577	\$ (3,055)	(5%)
407	587	(180)	(31%) (b)	Other Revenues (3)	1,815	2,348	(533)	(23%) ^(B)
 8,767	9,449	682	7% ^(c)	Retail Power Supply & Transmission	39,843	44,209	4,366	10% ^(C)
5,677	6,229	(552)	(9%)	Retail Margin	25,494	24,716	778	3%
				Wholesale				
889	3,394	(2,504)	(74%)	Wholesale Sales	3,720	20,007	(16,287)	(81%)
 810	3,309	2,499	76%	Wholesale Power Supply	3,485	19,507	16,022	82%
80	85	(5)	(6%)	Wholesale Margin	235	500	(265)	(53%)
5,756	6,314	(557)	(9%)	Gross Margin	25,729	25,216	513	2%
				Operating Expenses				
914	914	-	0%	Distribution	3,499	3,731	232	6%
118	118	-	0%	Administration/Safety	388	470	82	17% ^(D)
223	223	-	0%	Finance, Fleet, & Warehouse	717	891	174	20% ^(E)
507	507	-	0%	Transfer to General Fund for Cost Allocation	2,029	2,029	0	0%
446	446	-	0%	Customer Service, Marketing & Conservation	1,457	1,782	326	18% ^(F)
409	409	-	0%	Public Benefits	1,809	1,810	2	0%
185	185	-	0%	Security/Oper Technology	756	706	(50)	(7%) ^(G)
110	110	-	0%	Telecom	443	473	30	6%
183	183	-	0%	Construction & Maintenance	579	730	151	21% ^(H)
 1,575	1,575		0%	Depreciation	5,785	6,298	513	8%
4,668	4,668	-	0% ^(d)	Total Operating Expenses	17,461	18,921	1,460	8%
\$ 1,088	\$ 1,646	\$ (557)	(34%)	Operating Income/(Loss)	\$ 8,268	\$ 6,295	\$ 1,973	31%

Burbank Water and Power Electric Fund (496)

Estimated Statement of Changes in Net Assets (1) (2) (5) MTD and FYTD October 2019

(\$ in 000's)

	MTD FY 19-20		MTD Oct-19 Budget		\$ iance ⁽²⁾	% Variance			FYTD FY 19-20	D Oct-19 Budget	Var	\$ iance ⁽²⁾	% Variance
\$	1,088	\$	1,646	\$	(557)	(34%)	Operating Income/(Loss)		8,268	\$ 6,295	\$	1,973	31%
							Other Income/(Expenses)						
	162		162		-	0%	Interest Income		672	649		23	4%
	106		106		-	0%	Other Income/(Expense) (4)		(2,899)	(3,010)		111	4% (1)
	(344)		(344)		-	0%	Bond Interest/ (Expense)		(1,377)	(1,377)		-	0%
	(76)	-	(76)		-	0%	Total Other Income/(Expenses)		(3,604)	 (3,738)		134	4%
-	1,012		1,570		(557)	(36%)	Net Income		4,664	 2,556		2,107	82%
	125		125		-	0%	Capital Contributions (AIC)		(11)	462		(473)	(102%) (J)
\$	1,138	\$	1,695	\$	(557)	(33%)	Net Change in Net Assets (Net Income)	\$	4,652	\$ 3,018	\$	1,634	54%

This report may not foot due to rounding.

^{2. () =} Unfavorable

Other Revenues include transmission, telecom and internet revenues as well as other items such as damaged property recovery, connection fees, late fees, and tampering fees.

^{4.} Other Income/(Expense) includes miscellaneous revenue from the sale of scrap materials, inventory, and assets, as well as BABS subsidy.

^{5.} MTD is estimated for October 2019; FYTD reports July, August and September 2019 actuals.

Burbank Water and Power Electric Fund (496) Estimated Statement of Changes in Net Assets - Footnotes MTD October 2019 (\$ in 000's)

Foot- note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
a.	Electric Usage in MWh	90,470	99,416	(8,946) -	NEL is 9% lower than budget. Approximately 1% of this variance can be attributed to delays in the LADWP tunneling project. Note that NEL was conservatively budgeted at approximately the 60th percentile (all load/weather simulations calculated, 60% had NEL lower than the budgeted amount) of simulated load scenarios. For the month of October average high temperature was 85.2°F, compared to the normal of 81.2°F. MTD CDD were 142 versus the 15 year average of 125.
b.	Other Revenues	407	587	(180) -	Other revenues also include items such as damaged property recovery, connection fees, late fees, and tampering fees which tend to fluctuate.
C.	Retail Power Supply & Transmission	8,767	9,449	682 -	The favorable variance is attributable to various components within Retail Power Supply & Transmission. Please refer to page 5 for additional details.
d.	Total Operating Expenses	4,668	4,668		Expenses for October 2019 are estimated at budgeted values.

Burbank Water and Power Electric Fund (496)

Estimated Statement of Changes in Net Assets - Footnotes FYTD October 2019 (\$ in 000's)

Foot- note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
A.	Electric Usage in MWh	417,179	440,502	(23,323)	- NEL is 5% lower than budget. Approximately 1% of this variance can be attributed to delays in the LADWP tunneling project. Note that NEL was conservatively budgeted at approximately the 60th percentile (all load/weather simulations calculated, 60% had NEL lower than the budgeted amount) of simulated load scenarios. FYTD average high temperature was 85.9°F and the 15 year average high temperature was 85.2°F. FYTD CDD were 1069 versus the 15 year average of 1049.
В.	Other Revenues	1,815	2,348	(533)	Other revenues also include items such as damaged property recovery, connection fees, late fees, and tampering fees which tend to fluctuate.
C.	Retail Power Supply & Transmission	39,843	44,209	4,366	- The favorable variance is attributable to various components within Retail Power Supply & Transmission. Please refer to page 6 for additional details.
D.	Administration / Safety	388	470	82	 The favorable variance is primarily attributable to timing of expenditures for other professional services, general travel and training.
E.	Finance, Fleet, & Warehouse	717	891	174	 The favorable variance is primarily attributable to budgetary savings due to vacant positions, lower than planned spending on other professional services, and delayed spending on software support fees.
F.	Customer Service, Marketing & Conservation	1,457	1,782	326	 The favorable variance is primarily attributable to lower than planned spending on software & hardware, on professional services, and savings due to vacant positions.
G.	Security/Oper Technology	756	706	(50)	 The unfavorable variance is primarily attributable to higher than planned expenditures on project salaries and project salaries overhead, and timing of expenditures for membership dues expenses.
H.	Construction & Maintenance	579	730	151	- The favorable variance is primarily attributable to timing of expenditures for building grounds maintenance & repair and custodial services.
I.	Other Income/(Expense)	(2,899)	(3,010)	111	- Other Income/(Expense) includes miscellaneous revenue from the sale of scrap materials, inventory, and assets, as well as BABS subsidy. For July 2019, includes one-time pension payment to CalPERS of \$3.43M.
J.	Capital Contributions (AIC)	(11)	462	(473)	- The unfavorable variance is primarily attributable to the timing of AIC projects.

Estimated October 2019 Budget to Actual P&L Variance Highlights - Electric Fund (\$ in 000's)

	Vari	Variance Month-to-Date						
	Favorable Items		avorable tems	Budget to Actual Variance				
MTD NET INCOME/(LOSS): \$1,012		\$	(557)	\$	(557)			
MTD GROSS MARGIN VARIANCE								
Retail Sales			(1,055)		(1,055)			
Power Supply and Transmission								
- Lower retail load	259				259			
- Lower than planned renewables	170				170			
- Lower energy prices and economic dispatch	148				148			
- Lower transmission expenses than planned	105				105			
Other Revenues			(180)		(180)			
Wholesale Margin			(4)		(4)			
Total	682		(1,239)		(557)			

Estimated October 2019 Budget to Actual P&L Variance Highlights - Electric Fund (\$ in 000's)

		Varia	nce Fiscal Year-to	to-Date		
	Favorable Items		Unfavorable Items	Budget to Actual Variance		
FYTD NET INCOME / (LOSS): \$4,664	\$	2,107		\$	2,107	
FYTD GROSS MARGIN VARIANCE						
Retail Sales			(3,055)		(3,055)	
Power Supply and Transmission						
 Lower energy prices and economic dispatch 		2,474			2,474	
- Lower retail load		647			647	
 Lower O&M expenses than planned 		510			510	
 Lower than planned transmission expenses 		397			397	
- Lower than planned renewables	333				338	
Other Revenues			(533)		(533)	
Wholesale Margin			(265)		(265)	
Total		4,366	(3,853)		513	
FYTD EXPENSE AND OTHER VARIANCES						
Distribution		232			232	
Administration/Safety		82			82	
Finance, Fleet, & Warehouse		174			174	
Customer Service, Marketing & Conservation		326			326	
Public Benefits		2			2	
Security/Oper Technology			(50)		(50)	
Telecom		30			30	
Construction & Maintenance		151			151	
Depreciation expense		513			513	
All other		134			134	
Total		1,644	(50)		1,594	

Burbank Water and Power Electric Fund (496)

Estimated Statement of Cash Balances ^(a) (\$ in 000's)

	(Oct-19	 Sep-19	 Aug-19	 Jun-19	Jun-18	eserves	nimum eserves
Cash and Investments								
General Operating Reserve	\$	66,076	\$ 62,047	\$ 59,213	\$ 67,320 ^(b) \$	78,993	\$ 52,010	\$ 37,570
Capital & Debt Reduction Fund		10,000	10,000	10,000	10,000	10,000	21,000	5,200
BWP Projects Reserve Deposits at SCPPA		16,938	16,912	16,871	16,817	16,492		
Sub-Total Cash and Investments		93,015	 88,959	 86,084	 94,137	105,485	 73,010	 42,770
Capital Commitments						(6,740) ^(c)		
Customer Deposits		(4,885)	(4,822)	(4,268)	(5,641)	(5,432)		
Public Benefits Obligation		(6,854)	(6,607)	(6,787)	(6,069)	(5,549)		
Pacific Northwest DC Intertie		(855)	(1,389)	(1,389)	(2,218)	(7,455)		
Low Carbon Standard Fuel (d)		(2,267)	(2,267)	(2,267)	(2,267) ^(e)	(1,251)		
Cash and Investments (less Commitments)		78,153	73,874	71,373	77,942	79,059	73,010	42,770

⁽a) The Statement of Cash Balances may not add up due to rounding.

⁽b) Includes a \$3.95M loan to the Water Fund for the purchase of cyclic storage water.

⁽c) Denotes capital commitment for the Ontario Distribution Station and 4kV to 12kV conversion of circuits.

⁽d) Denotes funds reserved related to the sale of Low Carbon Fuel Standard (LCFS) credits, net of Electric Vehicle charger infrastructure expenditures.

⁽e) Includes the sale of \$1.15M of LCFS credits.

Burbank Water and Power Water Fund (497)

Estimated Statement of Changes in Net Assets (1) (2) (5) MTD and FYTD October 2019

(\$ in 000's except Gallons)

	MTD Y 19-20	MTD Oct-19 Budget	\$ Variance ⁽²⁾	% Variance	, , ,	FYTD FY 19-20	FYTD Oct-19 Budget	\$ Variance ⁽²⁾	% Variance
	505	496	10	2% ^(a)	Water put into the system in Millions of Gallons	2,036	2,109	(73)	(3%) ^(A)
	101	93	9	9%	Metered Recycled Water in Millions of Gallons	428	424	4	1% ^(B)
					Operating Revenues				
	2,765	2,660	\$ 105	4%	Potable Water	11,401	11,226	\$ 175	2% ^(C)
	373	380	(7)	(2%)	Recycled Water	1,734	1,737	(3)	(0%)
	56	62	(6)	(9%) (b)	Other Revenue (3)	117	248	(130)	(53%) ^(D)
	3,194	3,101	93	3%	Total Operating Revenues	13,252	13,211	42	0%
	1,162	1,200	39	3%	Water Supply Expense	4,849	5,146	297	6% ^(E)
	2,032	1,901	131	7%	Gross Margin	8,403	8,065	338	4%
_					Operating Expenses				
	696	696	-	0%	Operations & Maintenance - Potable	2,340	2,764	424	15% ^(F)
	137	137	-	0%	Operations & Maintenance - Recycled	515	549	34	6%
	209	209	-	0%	Allocated O&M	742	833	91	11% ^(G)
	172	172	-	0%	Transfer to General Fund for Cost Allocation	690	690	0	0%
	370	370		0%	Depreciation	1,347	1,479	132	9%
	1,585	1,585	-	0% (c)	Total Operating Expenses	5,633	6,315	682	11%
					Other Income/(Expenses)				
	21	21	-	0%	Interest Income	91	85	6	8%
	39	39	-	0%	Other Income/(Expense) (4)	(419)	(397)	(22)	(5%) (H)
	(159)	(159)	-	0%	Bond Interest/(Expense)	(628)	(635)	7	1%
	(99)	(99)	-	0%	Total Other Income/(Expenses)	(956)	(947)	(9)	(1%)
	349	218	131	60%	Net Income/(Loss)	1,814	803	1,012	126%
	40	40	-	0%	Aid in Construction	(124)	161	(285)	(177%) (I)
\$	390	\$ 258	\$ 131	51%	Net Change in Net Assets (Net Income)	\$ 1,691	\$ 964	\$ 727	75%

^{1.} This report may not foot due to rounding.

^{2. () =} Unfavorable

Other Revenue includes items such as damaged property recovery, connection fees, late fees, and tampering fees.

^{4.} Other Income/(Expense) includes miscellaneous revenue from the sale of scrap materials, inventory, and assets.

^{5.} MTD is estimated for October 2019; FYTD reports July, August and September 2019 actuals.

Burbank Water and Power Water Fund (497)

Estimated Statement of Changes in Net Assets - Footnotes

MTD October 2019 (\$ in 000's except Gallons)

Foot- note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
a.	Water put into the system in Millions of Gallons	505	496	10	 Potable water sales are higher due to higher demand. Burbank received no rainfall in October as compared to the monthly normal of 0.97 inches. Average high temperature was 85.2°F, compared to the normal of 81.2°F. MTD CDD were 142 versus the 15 year average of 125.
b.	Other Revenue	56	62	(6)	 Other revenues include items such as damaged property recovery, connection fees, late fees, and tampering fees, which tend to fluctuate.
c.	Total Operating	1,585	1,585	-	- Expenses for October 2019 are at budgeted values.

Expenses

Burbank Water and Power

Water Fund (497) Estimated Statement of Changes in Net Assets - Footnotes FYTD October 2019 (\$ in 000's except Gallons)

note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation	
A.	Water put into the system in Millions of Gallons	2,036	2,109	(73)	- FYTD Potable water sales are lower as sales are not rebounding at the same rate as historical potable sales under 3-day watering. Rainfall season-to-date was 1.24 inches less than the season normal of 1.29 inches. FYTD CDD were 1069 versus the 15 year average of 1049.	
В.	Metered Recycled Water in Millions of Gallons	428	424	4	- FYTD Recycled sales are within budget. Rainfall season-to-date was 1.24 inches less than the season normal of 1.29 inches. FYTD CDD were 1069 versus the 15 year average of 1049.	
C.	Potable Water	11,401	11,226	175	- The WCAC impact increased potable water revenues by \$119k YTD. Without this adjustment, potable revenues would be flat.	
						FYTD Actual
					WCAC Revenue	\$4,728
					WCAC Expenses	\$4,847
					WCAC revenue deferral/(accrual)	(\$119)
D.	Other Revenue	117	248	(130)	- Other revenues include items such as damaged property recovery, connection fees, late fees, and tampering fees, which tend to fluctuate.	
D. E.	Other Revenue Water Supply Expense	117 4,849	248 5,146			
				297	and tampering fees, which tend to fluctuate.	
E.	Water Supply Expense Operations &	4,849	5,146	297 424	and tampering fees, which tend to fluctuate.FYTD Water supply expense corresponds with lower demand.The favorable variance is primarily attributable to budgetary savings due to vacant positions,	
E. F.	Water Supply Expense Operations & Maintenance - Potable	4,849 2,340	5,146 2,764	297 424	 and tampering fees, which tend to fluctuate. FYTD Water supply expense corresponds with lower demand. The favorable variance is primarily attributable to budgetary savings due to vacant positions, and timing of expenditures for professional services. The favorable variance is primarily attributable to timing of expenditures for allocated expenses (Customer Service, Admin & Safety, Facilities and Conservation) from the Electric Fund, and 	

Estimated October 2019 Budget to Actual P&L Variance Highlights - Water Fund (\$ in 000's)

	Variance Month-to-Date						
		orable ems	Unfavorable Items	Ad	lget to ctual ciance		
MTD NET INCOME (LOSS): \$349	\$	131		\$	131		
MTD GROSS MARGIN VARIANCE							
Potable Revenues		105			105		
Recycled Revenues			(7)		(7)		
Other Revenue			(6)		(6)		
Water Supply Expense		39			39		
Total		144	(13)		131		
MTD O&M AND OTHER VARIANCES							
Operating expenses			-		-		
Other income/expenses		-			-		
Total		-			-		

Estimated October 2019 Budget to Actual P&L Variance Highlights - Water Fund (\$ in 000's)

	Variance Fiscal Year-to-Date							
		vorable Items	Unfavorable Items	Budget to Actual Variance				
FYTD NET INCOME: \$1,814	\$	1,012		\$	1,012			
FYTD GROSS MARGIN VARIANCE								
Potable Revenues Recycled Revenues Other Revenue Water Supply Expense Total		297 472	(3) (130) ————————————————————————————————————		175 (3) (130) 297 339			
FYTD O&M AND OTHER VARIANCES								
Potable O&M Recycled Water O&M Allocated O&M		424 34 91			424 34 91			
Depreciation Expense All Other Total		681	(8)		132 (8) 673			

Water Fund (497)
Estimated Statement of Changes in Cash and Investment Balances ^(a)
(\$ in 000's)

	Oct-19 Sep-19		Aug-19 Jun-19		Jun-18		Recommended Reserves		Minimum Reserves				
Cash and Investments													
General Operating Reserves	\$	14,581	\$	13,174	\$	11,940	\$ 11,555 ^(b)	\$	10,925	\$	12,630	\$	8,070
Capital Reserve Fund		2,220		2,220		2,220	2,220		2,220		5,200		1,300
Sub-Total Cash and Investments		16,801	-	15,394	-	14,160	 13,775		13,145		17,830		9,370
Customer Deposits		(1,221)		(1,252)		(1,448)	(1,454)		(607)				
Capital Commitments									(140) ^(c)				
Cash and Investments (less commitments)		15,580		14,142		12,712	 12,321		12,397		17,830		9,370

⁽a) The Statement of Cash Balances may not add up due to rounding.

⁽b) Includes a \$3.95M loan from the Electric Fund for the purchase of cyclic storage water.

⁽c) Capital commitment for the recycled water I-5 Freeway second tie crossing project paid in October 2018.