



CITY OF BURBANK BURBANK WATER AND POWER STAFF REPORT

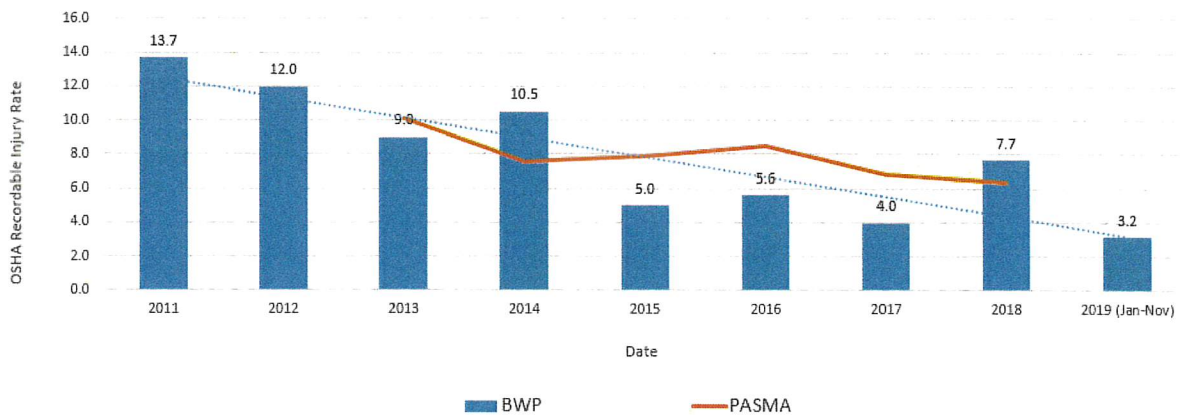
DATE: January 16, 2020
TO: BWP Board
FROM: Jorge Somoano, General Manager, BWP
SUBJECT: November 2019 Operating Results

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

SAFETY

For the month of November, BWP experienced zero OSHA recordable injuries; BWP's year to date (Jan – Nov) OSHA recordable rate is 3.2 for the end of November.

BWP TOTAL RECORDABLE INJURY RATE (TRIR) vs PASMA TRIR



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 November, Potable Water usage was 9% (35 million gallons) higher than budgeted and Potable Water Revenues were \$33,000 higher than budgeted. Recycled Water usage was 9% (7 million gallons) lower than budgeted and Recycled Water Revenues were \$5,000 lower than budgeted. November Water Supply Expenses were \$14,000 higher than budgeted. November's Gross Margin was \$31,000 higher than budgeted. Net Income was \$25,000, which was \$31,000 higher than budgeted.

November fiscal-year-to-date (FYTD) Potable Water usage was 1% (38 million gallons) lower than budgeted. FYTD November Potable Water Revenues were \$208,000 higher than budgeted. FYTD Recycled Water usage was on target and Recycled Water Revenues were \$30,000 higher than budgeted. FYTD Water Supply Expenses were \$283,000 lower than budgeted. The FYTD November Gross Margin was \$505,000 better than budgeted. Operating Expenses were \$727,000 lower than budgeted. Net Income was \$1,959,000, which was \$1,163,000 better than budgeted.

Electric Estimated Financial Results

For the month of November, electric loads were 5% lower than budget. Retail Sales were \$226,000 lower than budgeted. November Power Supply Expenses were \$1,092,000 lower than budgeted primarily due to lower energy prices, economic dispatch (the managing and optimizing of resources to meet system load) and lower O&M expenses than planned. November's Wholesale Margin was \$28,000 lower than budgeted. November's Gross Margin was \$772,000 higher than budgeted. Net Income was \$925,000, which was \$906,000 higher than budgeted.

FYTD November electric loads were 5% lower than budget. Retail Sales were \$3,273,000 lower than budgeted. FYTD Power Supply Expenses were \$5,657,000 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 O&M expenses. FYTD Wholesale Margin was \$292,000 lower than budgeted. FYTD Gross Margin was \$1,686,000 better than budgeted. November FYTD Operating Expenses were \$1,167,000 lower than budgeted. Net Income was \$5,621,000, which was \$3,045,000 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 November 2019 compared to November 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
November 2018	135 gpcd	139 gpcd
November 2019	140 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 September through November. The contract operator performed weekly and monthly sampling for the treatment plant and wells.

	Capacity Factor	Average Flow Rate (FY Total)
Sep-19	76.3%	6,867 gpm
Oct-19	88.35%	7,952 gpm
Nov-19	93.2%	8,393 gpm

Higher BOU Capacity factors are attributed to the operation of the newly constructed "temporary interconnection" between BWP and LADWP (LAIX). During the winter months, when BWP's demand is lower than the BOU's treatment capacity, we can use this additional capacity to treat the contaminated groundwater at a higher rate and send the balance of the treated water that is not used by Burbank to Los Angeles. The transfer agreement stipulates LADWP will directly reimburse MWD for the water used to blend and will reimburse BWP the costs related to O&M distribution and treatment. The LAIX began normal operation

in October 2019 and continues to date. The total transfer for the month of November was 214.8 ac/ft and the annual total is 293.3 ac/ft.

BWP Water transferred to LADWP in ac/ft.

Month	MWD	BOU	Total
August	0.7	0.8	1.5
September	0	0	0
October	21.3	55.7	77
November	57.6	157.2	214.8
			293.3

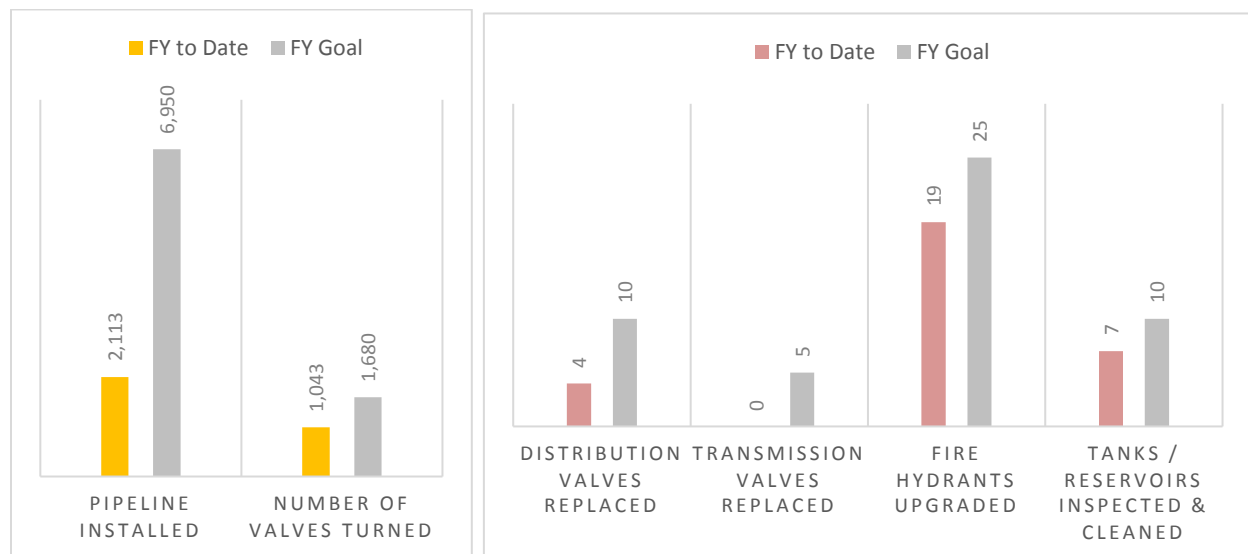
Project Updates

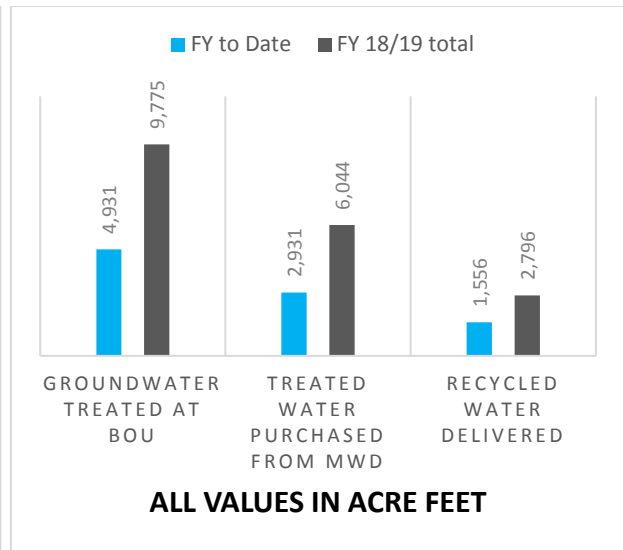
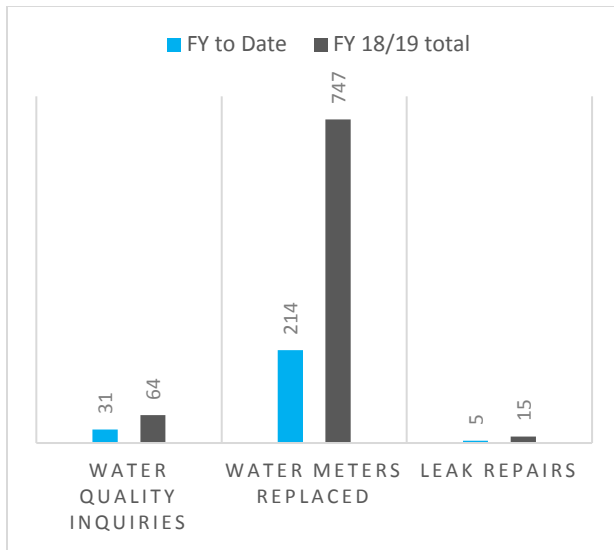
Due to the bountiful 2019 water year, MWD added excess water supply to its storage facilities. The available water exceeded MWD’s capacity to place water into its storage facilities so MWD authorized use from the previously created Cyclic Storage Program to allow Member Agencies to store water in their 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. During the month of November 1,772 acre-feet of water was spread, bringing the total 2019 water spread to 10,792 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 November 2019, 2,515 communication modules are not working properly out of 26,984 meters (about 9%). We previously notified 976 customers who participate in the Leak Alert Program that the failure of these communication modules prevents the sending of Leak Alert Notifications, and due to continued failures, we are now in the process of notifying an additional 304 customers.

Please note that the figure of 2,749 for non-communicating modules was transposed in the October report. The figure should have been 2,479.

4007 West Magnolia

Four-inch valve replacement for the annual valve maintenance program (the valve being replaced was broken in an unknown position). Replacing inoperable valves like this one helps to keep proper water circulation throughout the distribution system.



ELECTRIC DISTRIBUTION

ELECTRIC RELIABILITY

In November 2019, BWP did not experience any sustained feeder outages. In the past 12 months, automatic reclosing has reduced customer outage time by approximately 1,731,452 customer minutes.

Reliability Measurement	December 2017- November 2018	December 2018 - November 2019
Average Outages Per Year (SAIFI)	0.4419	0.2752
Average Outage Duration (CAIDI)	50.12 minutes	15.54 minutes
Average Service Availability	99.996%	99.999%
Average Momentary Outages Per Year (MAIFI)	0.2346	0.4135
No. of Sustained Feeder Outages	10	10
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

Mobile Substation

BWP acquired and recently received a 25MVA mobile substation compatible with voltage levels at all thirteen of BWP's distributing substations and two large customer substations. The mobile substation is an electrical substation mounted on a trailer including a substation transformer, circuit breakers, protective relaying and controls, and other auxiliary equipment.

In the event of an extended substation transformer outage, which can take a minimum of six months to procure, the mobile substation would be installed to

maintain BWP's reliability by sharing and reducing the electrical load on other substation transformers. Pictures of the mobile substation are below.



Mobile Substation at BWP Campus

4 kV Circuit Breaker Replacement for McCambridge M-15 Feeder

The 4 kV oil-filled circuit breaker (OCB) used for isolating McCambridge feeder M-15 was not opening as quickly as designed. After performing additional maintenance on this circuit breaker, it was determined that it could not be brought back to original design specifications. As such, this circuit breaker was removed and replaced with new vacuum circuit breaker (VCB). The new VCB opens faster than the original OCB, which means it does a better job of protecting equipment and reducing arc flash exposure to personnel.



Original 4 kV Oil Circuit Breaker for McCambridge M-15



New 4 kV Vacuum Circuit Breaker for McCambridge M-15

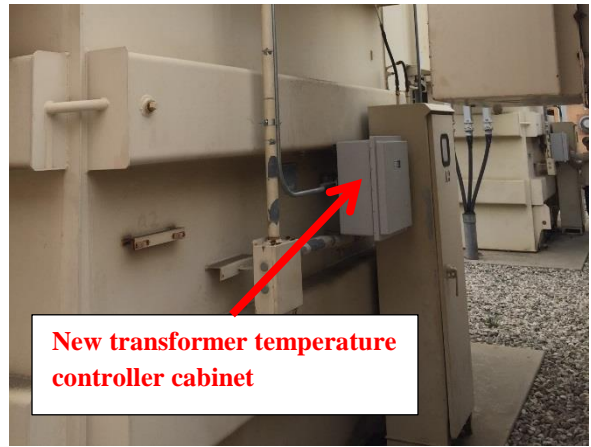
Transformer Temperature Monitor Installation at San Jose

BWP has been in the process of installing new temperature monitors for 38 of its 42 substation transformer banks (the remaining four transformer banks already have temperature monitors). Since 2015, BWP has installed 21 temperature monitors and is on track to complete the remaining transformer monitor installations by Fiscal Year 2022-23.

In November, BWP installed two additional transformer temperature sensors and monitors at the San Jose Substation. The new monitors transmit transformer oil and winding temperatures to the Energy Control Center (ECC) and allow for automatic control, as well as remote control of future transformer cooling fans from the ECC. System operators and engineers will use temperature information to quickly identify abnormal operating conditions and determine whether a substation transformer is loaded beyond its normal rating.



Transformer Bank A-2 Before Installation



Transformer Bank A-2 After Installation

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, 61.87% of the total streetlight luminaires have been converted to LEDs, which translates to an annualized energy savings of 3,395MWh or a 36.63% reduction in energy consumption. LED conversions have also reduced evening load by 775kW, 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	31%
Issue of the month	8%
Disconnect/Reconnect	7%
Payment Extension	6%
Other	48%

	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	% Inc/Dec
Call Volume	7227	5740	6310	5029	5507	5417	4675	5374	4330	5389	24%

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	Nov-19	Dec-19	Total**	% of Total*
Enrollments	18,498	6,317	3,052	1,742	1,294	1,126	1,002	824	576	781	25,453	49%
Paperless	17,047	5,704	3,045	1,729	1,288	1,119	995	823	495	779	21,876	42%
Autopay	2,354	2,376	1,170	985	614	559	462	420	373	376	12,927	26%

* Percent as compared to all active BWP accounts.

** Customers with an active BWP Account.

Electric Vehicle (EV) Charging Program

Forty-seven public EV charging ports are installed in Burbank, including 2 DC Fast Chargers and 18 curbside chargers. As of November 2019, pricing for public EV charging returned to off-peak rates of \$0.1753 per kilowatt-hour (kWh) for Level 1 and Level 2 and \$0.2817 per kWh for the DC Fast Chargers.

Month of usage	Chargers Available	Usage in kWh	Gross Revenue	GHG reduced in kg	kWh/ Station/ Day	% Peak Sessions	Charging Occupancy
Nov 2019	42	17,028	\$3,336	7,152	13.2	23%	14%
Oct 2019	35	16,847	\$3,175	7,076	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	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	45	22,145	\$3,879	9,301	18	20%	20%
Oct 2018	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%

Five charging ports were out of service during November. The EV chargers at 133 E. Orange Grove, Civic Center parking, Lakeside Shopping Center, and 1113 W. Alameda were replaced with new dual-port level 2 chargers. The count of charging ports at the Civic Center parking was increased by two by replacing the single port chargers with dual-port chargers.

Port Location	# of Ports	Out of Service Date	Issue	Expected Back in Service Date
2034 N. Hollywood Way	2	19-Mar	Cable retractor failure	20-Jan
533 S. Glenoaks Blvd	2	19-Aug	Cable retractor failure	20-Jan
340 N. Buena Vista St.	2	19-Sep	Cable retractor failure	20-Jan
2116 Glenoaks Blvd.	1	19-Oct	Cable retractor failure	20-Jan

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
Nov 2019	10	40	839	8,251
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

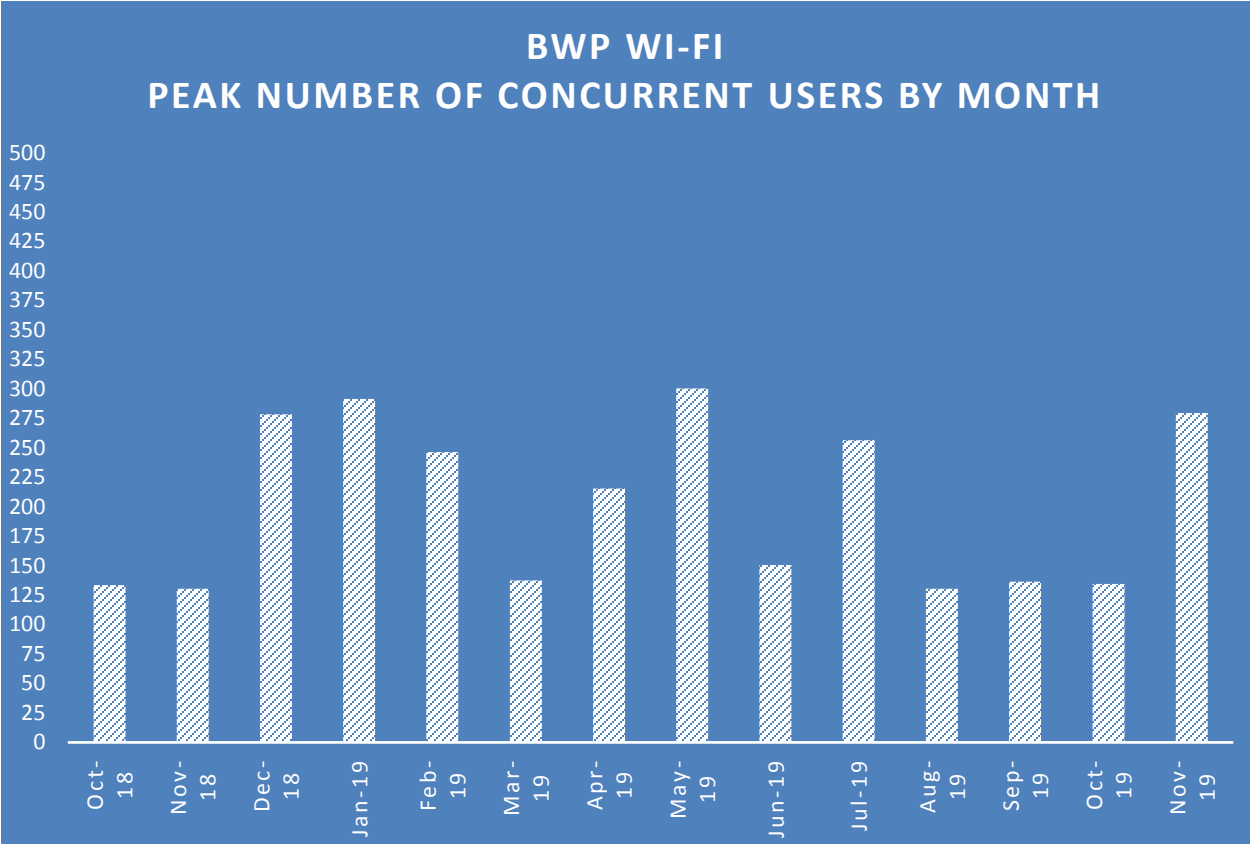
Broadband Services (ONE Burbank)

	November 2019 New Orders	Revenues for November 2019	FYTD 2019-20 Revenues	FYTD Budget
Lit	4	\$111,774	\$568,308	\$641,667
Dark	2	\$195,065	\$1,008,300	\$962,500
Total	6	\$306,839	\$1,576,608	\$1,604,167

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.)



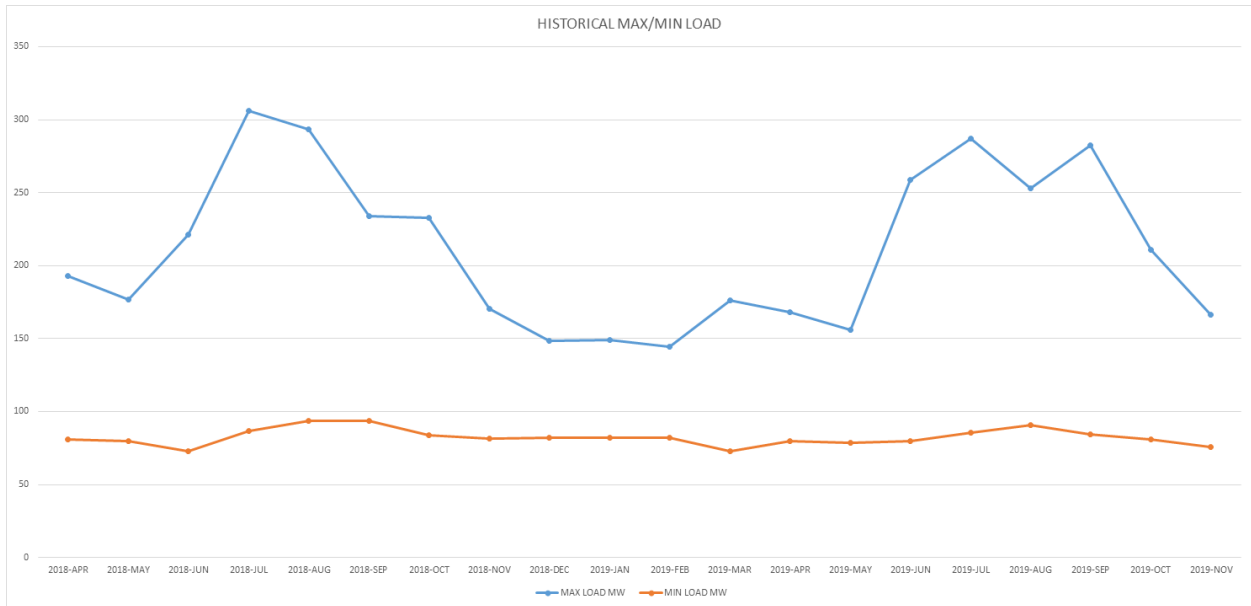
Cyber Security Update – November 2019

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 November 2019 was 166.3 MW at 2:51 PM on Friday, November 8, and the minimum load was 81.1 MW at 3:56 AM on Sunday, November 10.



Minimum load values corrected for Sept & Dec 2018.

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

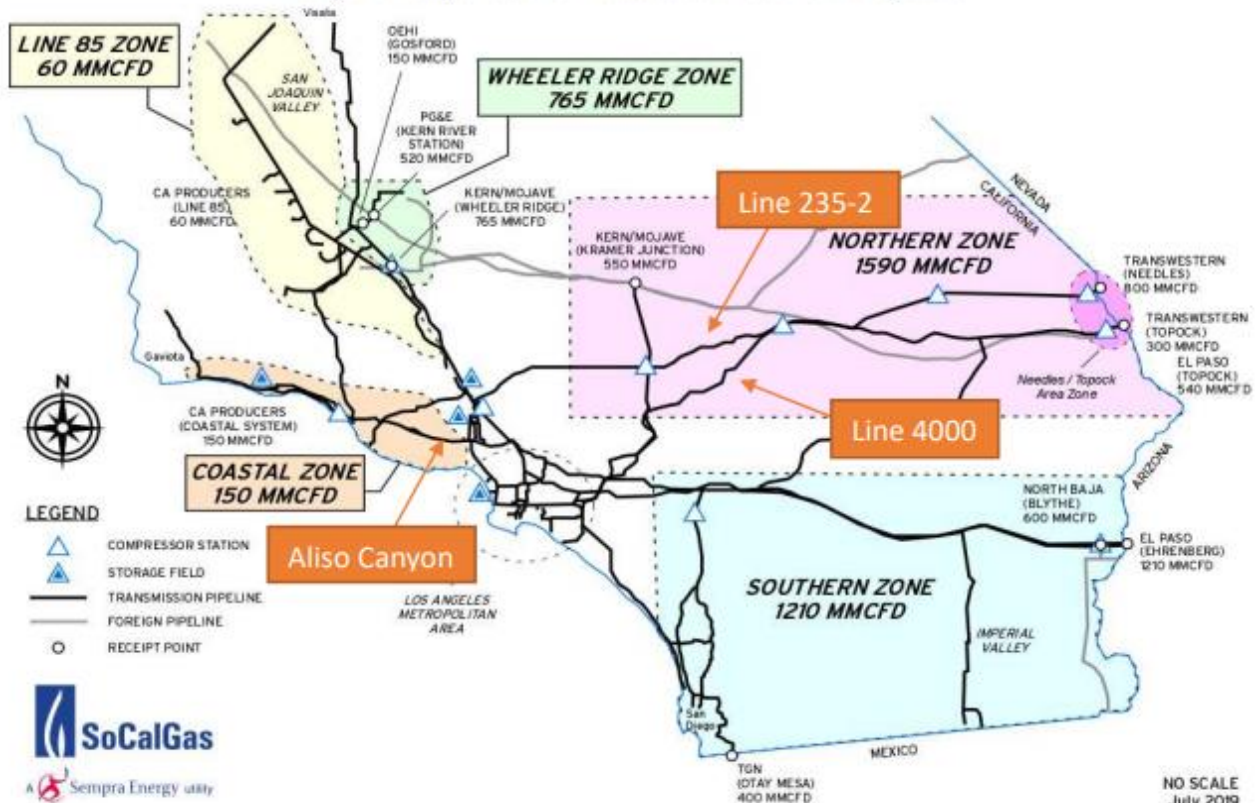
The Burbank power system did not experience abnormal weather or natural gas supply issues for November 2019.

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.

Image 1: Receipt Points & Transmission Zone Firm Capacities



Line 235-2

Line 235-2 (largely a 1957 vintage pipeline) returned to service at a reduced pressure on October 15, 2019 after a rupture on October 1, 2017.

During additional progressive restorations of pressure and the associated leak surveys, non-hazardous leaks were detected on June 7 (leak #9) and June 18 (leak #10) in remote areas of the desert, which requires additional remediation on Line 235-2. For leak #9, the required authorizations have been received from the Bureau of Land Management and California Department of Fish and Wildlife for the leak

repair work site with construction commencing. For leak #10, these authorization requests will be submitted shortly.

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 was taken out of service on September 19 for validation digs. Line 4000 returned to service on October 24 at reduced pressure.

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%	6	200	45	2
MPP	100%	720	125,423	4,998	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 two times during the month of November.

Magnolia Power Project (MPP)

	November	FYTD	YTD
Availability	92%	96%	95%
Unit Capacity Factor (240 MW)	73%	76%	75%

MPP was shut down on November 15, 2019 for a scheduled offline water wash of the combustion turbine compressor. Several other preventative maintenance items were also completed during the outage. MPP was successfully restarted on November 18, 2019 and released to the Participants for dispatch at 12:00PM, as scheduled.

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.

Generation ended October 19 and maintenance work is in progress.



Unit 2 Generator Rotor Inspection



Unit 2 Generator Stator Inspection

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 were reviewed and approved by the SCAQMD. The draft permits are now with 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 review once the SCAQMD issues a draft permit. After the review is complete, a final permit will be issued.**

Storm Water

On November 27, storm water samples were collected at the BWP campus. Storm water samples are required to be analyzed by an independent laboratory and the results submitted to the State Water Resources Control Board's online reporting tool. The analytical results indicated elevated levels of copper, iron and zinc. BWP is in the environmental review process for a storm water improvement project to address the storm water compliance issues.

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

The Project is now approximately 79% complete (based on actual cost incurred as of November 30, 2019 versus the anticipated total cost at completion); it remains on schedule, and the anticipated total cost at completion remains within budget.

During November, excavation work and installation of the underground electrical was completed, along with concrete placement for equipment foundations. New electrical switchgear was set, and a flare outage was taken to facilitate connection and energization of the new gear; now the plant is powered through the new switchgear.

The Unison gas conditioning system and the Capstone microturbine package were delivered to site and set in place on November 26, 2019. With the major equipment installed, interconnection pipe routing details were finalized, and shop fabrication of piping was begun. Commissioning and start-up of the new systems will begin in January, following the holiday break.

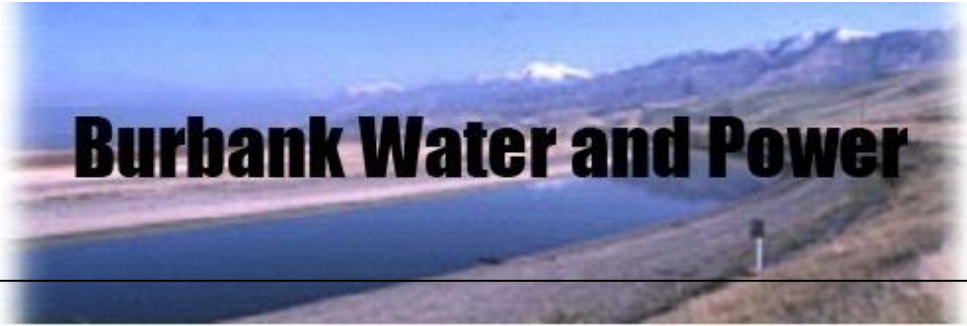
Substantial completion of the Project is expected on or before February 3, 2020. Work on the Project currently is on schedule in support of the substantial completion date.



LFG Conditioning Skid



Capstone Microturbine System



**Estimated Financial Report
November-19**

**Burbank Water and Power
Electric Fund (496)
Estimated Statement of Changes in Net Assets ^{(1) (2) (5)}
MTD and FYTD November 2019
(\$ in 000's except MWh Sales)**

MTD FY 19-20	MTD Nov-19 Budget	\$ Variance ⁽²⁾	% Variance		FYTD FY 19-20	FYTD Nov-19 Budget	\$ Variance ⁽²⁾	% Variance
80,999	85,631	(4,632)	(5%) ^(a)	NEL MWh	498,178	526,133	(27,955)	(5%) ^(A)
				Retail				
\$ 12,788	\$ 13,014	\$ (226)	(2%)	Retail Sales	\$ 76,318	\$ 79,591	\$ (3,273)	(4%)
521	587	(67)	(11%) ^(b)	Other Revenues ⁽³⁾	2,529	2,935	(407)	(14%) ^(B)
<u>7,885</u>	<u>8,977</u>	<u>1,092</u>	<u>12%</u> ^(c)	Retail Power Supply & Transmission	<u>47,529</u>	<u>53,186</u>	<u>5,657</u>	<u>11%</u> ^(C)
5,424	4,624	800	17%	Retail Margin	31,318	29,340	1,978	7%
				Wholesale				
819	3,748	(2,929)	(78%)	Wholesale Sales	4,539	23,754	(19,215)	(81%)
<u>753</u>	<u>3,654</u>	<u>2,901</u>	<u>79%</u>	Wholesale Power Supply	<u>4,237</u>	<u>23,161</u>	<u>18,923</u>	<u>82%</u>
66	94	(28)	(30%)	Wholesale Margin	302	594	(292)	(49%)
<u>5,490</u>	<u>4,718</u>	<u>772</u>	<u>16%</u>	Gross Margin	<u>31,619</u>	<u>29,934</u>	<u>1,686</u>	<u>6%</u>
				Operating Expenses				
914	914	-	0%	Distribution	4,558	4,646	87	2%
139	139	-	0%	Administration/Safety	610	608	(2)	(0%)
229	229	-	0%	Finance, Fleet, & Warehouse	769	1,120	351	31% ^(D)
507	507	-	0%	Transfer to General Fund for Cost Allocation	2,536	2,536	0	0%
446	446	-	0%	Customer Service, Marketing & Conservation	2,046	2,228	182	8%
352	352	-	0%	Public Benefits	2,076	2,162	86	4%
168	168	-	0%	Security/Oper Technology	904	874	(30)	(3%)
110	110	-	0%	Telecom	548	583	35	6%
183	183	-	0%	Construction & Maintenance	814	913	99	11%
<u>1,575</u>	<u>1,575</u>	<u>-</u>	<u>0%</u>	Depreciation	<u>7,514</u>	<u>7,873</u>	<u>359</u>	<u>5%</u>
4,622	4,622	-	0% ^(d)	Total Operating Expenses	22,376	23,543	1,167	5%
<u>\$ 867</u>	<u>\$ 96</u>	<u>\$ 772</u>	<u>807%</u>	Operating Income/(Loss)	<u>\$ 9,243</u>	<u>\$ 6,391</u>	<u>\$ 2,853</u>	<u>45%</u>

**Burbank Water and Power
Electric Fund (496)
Estimated Statement of Changes in Net Assets ^{(1) (2) (5)}
MTD and FYTD November 2019**

(\$ in 000's)

MTD FY 19-20	MTD Nov-19 Budget	\$ Variance ⁽²⁾	% Variance		FYTD FY 19-20	FYTD Nov-19 Budget	\$ Variance ⁽²⁾	% Variance
\$ 867	\$ 96	\$ 772	807%	Operating Income/(Loss)	\$ 9,243	\$ 6,391	\$ 2,853	45%
				Other Income/(Expenses)				
237	162	75	46%	Interest Income	899	811	87	11%
165	106	59	56%	Other Income/(Expense) ⁽⁴⁾	(2,799)	(2,904)	105	4%
(344)	(344)	-	0%	Bond Interest/ (Expense)	(1,722)	(1,722)	-	0%
58	(76)	134	176%	Total Other Income/(Expenses)	(3,622)	(3,815)	192	5%
925	20	906	4623%	Net Income	5,621	2,576	3,045	118%
31	125	(95)	(75%)	Capital Contributions (AIC)	88	587	(499)	(85%) ^(E)
<u>\$ 956</u>	<u>\$ 145</u>	<u>\$ 811</u>	<u>560%</u>	Net Change in Net Assets (Net Income)	<u>\$ 5,709</u>	<u>\$ 3,163</u>	<u>\$ 2,546</u>	<u>80%</u>

1. This report may not foot due to rounding.

2. () = Unfavorable

3. 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 November 2019 actuals (estimated for Operating Expenses); FYTD reports July through November 2019 actuals.

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

Foot- note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
a.	Electric Usage in MWh	80,999	85,631	(4,632)	- NEL is 5% lower than budget. For the month of November average high temperature was 76.8°F, compared to the normal of 75.9°F. MTD HDD were 142 versus the 15 year average of 131. MTD CDD were 39 versus the 15 year average of 32.
b.	Other Revenues	521	587	(67)	- 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	7,885	8,977	1,092	- 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	4,622	4,622	-	- Expenses for November 2019 are estimated at budgeted values.

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

Foot- note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
A.	Electric Usage in MWh	498,178	526,133	(27,955)	- NEL is 5% lower than budget. FYTD actual average high summer temperature is 86.9°F and the 15 year summer average high temperature is 85.9°F. FYTD CDD were 1108 versus the 15 year average of 1081.
B.	Other Revenues	2,529	2,935	(407)	- 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	47,529	53,186	5,657	- The favorable variance is attributable to various components within Retail Power Supply & Transmission. Please refer to page 6 for additional details.
D.	Finance, Fleet, & Warehouse	769	1,120	351	- The favorable variance is primarily attributable to budgetary savings due to vacant positions, delayed spending on software support fees, and lower than planned spending on other professional services.
E.	Capital Contributions (AIC)	88	587	(499)	- The unfavorable variance is primarily attributable to the timing of AIC projects.

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

	Variance Month-to-Date		
	<u>Favorable Items</u>	<u>Unfavorable Items</u>	<u>Budget to Actual Variance</u>
<u>MTD NET INCOME/(LOSS): \$925</u>	\$ 906		\$ 906
<u>MTD GROSS MARGIN VARIANCE</u>			
Retail Sales		(226)	(226)
Power Supply and Transmission			
- Lower O&M expenses than planned	338		338
- Lower energy prices and economic dispatch	240		240
- SCPPA True Up	225		225
- Lower retail load	128		128
- Lower than planned renewables	113		113
- Lower transmission expenses than planned	48		48
Other Revenues & Other income/(Expenses)		(67)	(67)
Wholesale Margin		(27)	(27)
Sub-Total	<u>1,092</u>	<u>(320)</u>	<u>772</u>
Other Income / (Expenses)	134		134
Total	<u><u>1,226</u></u>	<u><u>(320)</u></u>	<u><u>906</u></u>

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

	Variance Fiscal Year-to-Date		
	<u>Favorable Items</u>	<u>Unfavorable Items</u>	<u>Budget to Actual Variance</u>
<u>FYTD NET INCOME / (LOSS): \$5,621</u>	\$ 3,045		\$ 3,045
<u>FYTD GROSS MARGIN VARIANCE</u>			
Retail Sales		(3,273)	(3,273)
Power Supply and Transmission			
- Lower energy prices and economic dispatch	2,716		2,716
- Lower O&M expenses than planned	1,045		1,045
- Lower retail load	775		775
- Lower than planned transmission expenses	445		445
- Lower than planned renewables	451		451
- SCPPA True Up	225		225
Other Revenues		(407)	(407)
Wholesale Margin		(292)	(292)
Total	<u>5,657</u>	<u>(3,972)</u>	<u>1,685</u>
<u>FYTD EXPENSE AND OTHER VARIANCES</u>			
Distribution	87		87
Administration/Safety		(2)	(2)
Finance, Fleet, & Warehouse	351		351
Customer Service, Marketing & Conservation	182		182
Public Benefits	86		86
Security/Oper Technology		(30)	(30)
Telecom	35		35
Construction & Maintenance	99		99
Depreciation expense	359		359
All other	192		192
Total	<u>1,391</u>	<u>(32)</u>	<u>1,359</u>

**Burbank Water and Power
Electric Fund (496)
Estimated Statement of Cash Balances ^(a)
(\$ in 000's)**

	<u>Nov-19</u>	<u>Oct-19</u>	<u>Sep-19</u>	<u>Jun-19</u>	<u>Jun-18</u>	<u>Recommended Reserves</u>	<u>Minimum Reserves</u>
Cash and Investments							
General Operating Reserve	\$ 66,329	\$ 66,598	\$ 62,047	\$ 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	16,944	16,938	16,912	16,817	16,492		
Sub-Total Cash and Investments	<u>93,273</u>	<u>93,536</u>	<u>88,959</u>	<u>94,137</u>	<u>105,485</u>	<u>73,010</u>	<u>42,770</u>
Capital Commitments					(6,740) ^(c)		
Customer Deposits	(6,054)	(4,885)	(4,822)	(5,641)	(5,432)		
Public Benefits Obligation	(6,716)	(7,307)	(6,607)	(6,069)	(5,549)		
Pacific Northwest DC Intertie	(855)	(1,389)	(1,389)	(2,218)	(7,455)		
Low Carbon Fuel Standard ^(d)	(2,267)	(2,267)	(2,267)	(2,267) ^(e)	(1,251)		
Cash and Investments (less Commitments)	<u><u>77,381</u></u>	<u><u>77,687</u></u>	<u><u>73,874</u></u>	<u><u>77,942</u></u>	<u><u>79,059</u></u>	<u><u>73,010</u></u>	<u><u>42,770</u></u>

(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 November 2019
(\$ in 000's except Gallons)**

MTD FY 19-20	MTD Nov-19 Budget	\$ Variance ⁽²⁾	% Variance		FYTD FY 19-20	FYTD Nov-19 Budget	\$ Variance ⁽²⁾	% Variance
445	410	35	9% ^(a)	Water put into the system in Millions of Gallons	2,481	2,518	(38)	(1%) ^(A)
71	78	(7)	(9%) ^(b)	Metered Recycled Water in Millions of Gallons	500	502	(2)	(0%) ^(B)
				Operating Revenues				
2,313	2,280	\$ 33	1% ^(c)	Potable Water	13,715	13,507	\$ 208	2% ^(C)
315	320	(5)	(2%)	Recycled Water	2,087	2,057	30	1%
79	62	17	27% ^(d)	Other Revenue ⁽³⁾	293	309	(16)	(5%) ^(D)
<u>2,707</u>	<u>2,663</u>	<u>44</u>	<u>2%</u>	Total Operating Revenues	<u>16,095</u>	<u>15,873</u>	<u>222</u>	<u>1%</u>
1,001	987	(14)	(1%)	Water Supply Expense	5,850	6,133	283	5% ^(E)
<u>1,706</u>	<u>1,675</u>	<u>31</u>	<u>2%</u>	Gross Margin	<u>10,245</u>	<u>9,740</u>	<u>505</u>	<u>5%</u>
				Operating Expenses				
692	692	-	0%	Operations & Maintenance - Potable	3,055	3,456	401	12% ^(F)
137	137	-	0%	Operations & Maintenance - Recycled	643	686	43	6%
211	211	-	0%	Allocated O&M	937	1,045	107	10%
172	172	-	0%	Transfer to General Fund for Cost Allocation	862	862	0	0%
<u>370</u>	<u>370</u>	<u>-</u>	<u>0%</u>	Depreciation	<u>1,673</u>	<u>1,849</u>	<u>176</u>	<u>9%</u>
1,583	1,583	-	0% ^(e)	Total Operating Expenses	7,170	7,898	727	9%
				Other Income/(Expenses)				
21	21	-	0%	Interest Income	118	106	11	11%
39	39	-	0%	Other Income/(Expense) ⁽⁴⁾	(448)	(358)	(90)	(25%) ^(G)
(159)	(159)	-	0%	Bond Interest/(Expense)	(785)	(793)	9	1%
<u>(99)</u>	<u>(99)</u>	<u>-</u>	<u>0%</u>	Total Other Income/(Expenses)	<u>(1,115)</u>	<u>(1,045)</u>	<u>(69)</u>	<u>(7%)</u>
25	(6)	31	505%	Net Income/(Loss)	1,959	797	1,163	146%
40	40	-	0%	Aid in Construction	140	202	(61)	(30%) ^(H)
<u>\$ 65</u>	<u>\$ 34</u>	<u>\$ 31</u>	<u>89%</u>	Net Change in Net Assets (Net Income)	<u>\$ 2,100</u>	<u>\$ 998</u>	<u>\$ 1,102</u>	<u>110%</u>

1. This report may not foot due to rounding.

2. () = Unfavorable

3. 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 November 2019; FYTD reports July through October 2019 actuals.

Burbank Water and Power
Water Fund (497)
Estimated Statement of Changes in Net Assets - Footnotes
MTD November 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	445	410	35	- Potable water sales are lower due to lower demand. For the month of November average high temperature was 76.8°F, compared to the normal of 75.9°F. MTD HDD were 142 versus the 15 year average of 131. MTD CDD were 39 versus the 15 year average of 32.	
b.	Recycled Water Usage in Millions of Gallons	71	78	(7)	- Recycled water sales are lower due to lower demand. Burbank received 1.85 inches of rainfall in November as compared to the monthly normal of 1.07 inches.	
c.	Potable Water Revenue	2,313	2,280	33	- The WCAC impact decreased potable water revenues by \$150k MTD. Without this adjustment, potable water revenues would be favorable by 8%.	
						MTD Actual
					WCAC Revenue	\$1,151
					WCAC Expenses	\$1,001
					WCAC revenue deferral/(accrual)	\$150
d.	Other Revenue	79	62	17	- Other revenues include items such as damaged property recovery, connection fees, late fees, and tampering fees, which tend to fluctuate.	
e.	Total Operating Expenses	1,583	1,583	-	- Expenses for November 2019 are at budgeted values.	

Burbank Water and Power
Water Fund (497)
Estimated Statement of Changes in Net Assets - Footnotes
FYTD November 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	2,481	2,518	(38)	- FYTD Potable water sales are slightly lower as sales are now rebounding due to lower rainfall to date. Rainfall season-to-date was .46 inches less than the season normal of 2.36 inches. FYTD CDD were 1108 versus the 15 year average of 1081.
B.	Metered Recycled Water in Millions of Gallons	500	502	(2)	- FYTD Recycled sales are within budget. Rainfall season-to-date was .46 inches less than the season normal of 2.36 inches. FYTD CDD were 1108 versus the 15 year average of 1081.
C.	Potable Water	13,715	13,507	208	- The WCAC impact decreased potable water revenues by \$32k YTD. Without this adjustment, potable revenues would be favorable by 2%.
					FYTD Actual
					WCAC Revenue
					\$5,879
					WCAC Expenses
					\$5,848
					WCAC revenue deferral/(accrual)
					\$32
D.	Other Revenue	293	309	(16)	- Other revenues include items such as damaged property recovery, connection fees, late fees, and tampering fees, which tend to fluctuate.
E.	Water Supply Expense	5,850	6,133	283	- FYTD Water supply expense corresponds with lower demand.
F.	Operations & Maintenance - Potable	3,055	3,456	401	- The favorable variance is primarily attributable to timing of expenditures for professional services and budgetary savings due to vacant positions.
G.	Other Income / (Expense)	(448)	(358)	(90)	- Other Income/(Expense) includes miscellaneous revenue from the sale of scrap materials, inventory, and other assets which tend to fluctuate.
H.	Aid in Construction	140	202	(61)	- The unfavorable variance is attributable to the timing of AIC projects.

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

	Variance Month-to-Date		
	<u>Favorable Items</u>	<u>Unfavorable Items</u>	<u>Budget to Actual Variance</u>
<u>MTD NET INCOME (LOSS): \$25</u>	\$ 31		\$ 31
<u>MTD GROSS MARGIN VARIANCE</u>			
Potable Revenues	33		33
Recycled Revenues		(5)	(5)
Other Revenue	17		17
Water Supply Expense		(14)	(14)
Total	<u>50</u>	<u>(19)</u>	<u>31</u>
<u>MTD O&M AND OTHER VARIANCES</u>			
Operating expenses		-	-
Other income/expenses	-		-
Total	<u>-</u>	<u>-</u>	<u>-</u>

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

	<u>Variance Fiscal Year-to-Date</u>		
	<u>Favorable</u>	<u>Unfavorable</u>	<u>Budget to</u>
	<u>Items</u>	<u>Items</u>	<u>Actual</u>
			<u>Variance</u>
<u>FYTD NET INCOME: \$1,959</u>	\$ 1,163		\$ 1,163
 <u>FYTD GROSS MARGIN VARIANCE</u>			
Potable Revenues	208		208
Recycled Revenues	30		30
Other Revenue		(16)	(16)
Water Supply Expense	283		283
Total	<u>521</u>	<u>(16)</u>	<u>505</u>
 <u>FYTD O&M AND OTHER VARIANCES</u>			
Potable O&M	401		401
Recycled Water O&M	43		43
Allocated O&M	107		107
Depreciation Expense	176		176
All Other		(69)	(69)
Total	<u>727</u>	<u>(69)</u>	<u>658</u>

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

	<u>Nov-19</u>	<u>Oct-19</u>	<u>Sep-19</u>	<u>Jun-19</u>	<u>Jun-18</u>	<u>Recommended Reserves</u>	<u>Minimum Reserves</u>
Cash and Investments							
General Operating Reserves	\$ 15,309	\$ 14,417	\$ 13,174	\$ 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	<u>17,529</u>	<u>16,637</u>	<u>15,394</u>	<u>13,775</u>	<u>13,145</u>	<u>17,830</u>	<u>9,370</u>
Customer Deposits	(1,218)	(1,221)	(1,252)	(1,454)	(607)		
Capital Commitments					(140) ^(c)		
Cash and Investments (less commitments)	<u>16,311</u>	<u>15,416</u>	<u>14,142</u>	<u>12,321</u>	<u>12,397</u>	<u>17,830</u>	<u>9,370</u>

^(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.