



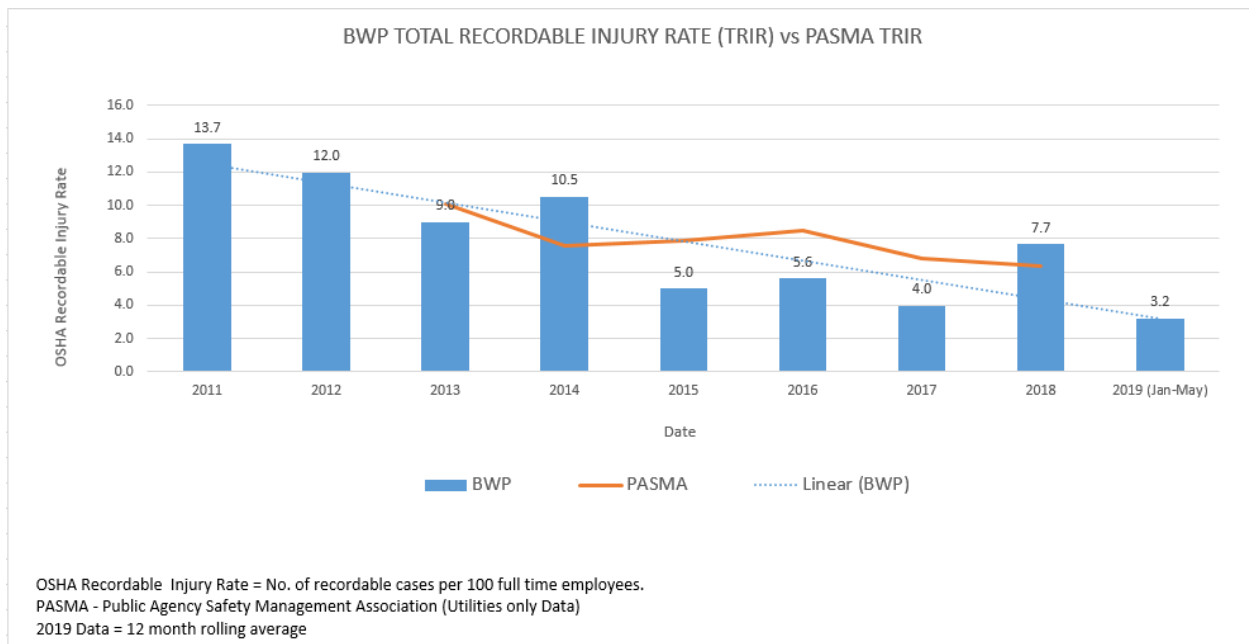
CITY OF BURBANK BURBANK WATER AND POWER STAFF REPORT

DATE: July 4, 2019
TO: BWP Board
FROM: Jorge Somoano, General Manager, BWP
SUBJECT: May 2019 Operating Results

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

SAFETY

For the month of May, BWP experienced one OSHA recordable injury. BWP's OSHA recordable rate dropped from 3.5, as reported for end of April, to 3.2 as of the end of May.



Water Financial Results

For the month of May, Potable water usage was 1% (3 million gallons) lower than budgeted and Potable Water Revenues were \$134,000 lower than budgeted. Recycled water usage was 14% (12 million gallons) lower than budgeted due to lower irrigation. Recycled Water Revenues were \$62,000 lower than budgeted. May Water Supply Expenses were \$63,000 lower than budgeted due to lower demand. May's Gross Margin was \$146,000 lower than budgeted. Net Income was -\$202,000, which was \$146,000 lower than budgeted.

May fiscal-year-to-date (FYTD) Potable water usage was 1% (56 million gallons) lower than budgeted. FYTD May Potable Water Revenues were \$608,000 lower than budgeted. FYTD recycled usage was 6% (57 million gallons) lower than budgeted and Recycled Water Revenues were \$301,000 lower than budgeted. FYTD Water Supply Expenses were \$156,000 lower than budgeted due to lower demand. The FYTD May Gross Margin was \$798,000 lower than budgeted. Operating Expenses were \$1,080,000 lower than budgeted. Net Income was \$1,462,000, which was \$389,000 higher than budgeted.

Electric Financial Results

For the month of May, electric loads were 11% lower than budgeted due to more moderate weather. Retail Sales were \$1,414,000 lower than budgeted. May Power Supply Expenses were \$842,000 lower than budgeted primarily due to receiving less renewable energy than planned, and lower energy prices and economic dispatch. May's wholesale margin was \$2,000 lower than budgeted. May's Gross Margin was \$574,000 lower than budgeted. Net Income was -\$819,000 which was \$574,000 lower than budgeted.

FYTD May electric loads were 4% lower than budgeted due to conservation. Retail Sales were \$4,555,000 lower than budgeted. FYTD Power Supply Expenses were \$4,898,000 lower than budgeted primarily due to prior period true up credits, and lower than planned O&M expenses. FYTD Wholesale Margin was \$343,000 higher than budgeted. FYTD Gross Margin was \$141,000 higher than budgeted. May FYTD Operating Expenses were \$4,344,000 lower than budgeted. Net Income was \$10,445,000 which was \$4,506,000 higher 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. The 2019 allocation of 75% amounts to 3,145,105 acre-feet of water. Reservoir storage, snowpack, precipitation, and releases to meet local deliveries are among several factors used in determining allocations.

Even in wet years, a 100% allocation is rare due to Delta pumping restrictions to protect threatened and endangered fish species. The last time the Project was able to allocate 100% was 2006.

Burbank’s Water Use

The table below shows water use in Burbank during May 2019 compared to May 2018 measured in gallons per capita per day (gpcd). Also shown is a comparison of Burbank’s average water use through the end of May 2018 and 2019 on a fiscal year basis (i.e., July 1 through May 31).

	Average Monthly Use	Average Monthly Use Fiscal Year Basis
May 2018	124 gpcd	129 gpcd
May 2019	119 gpcd	124 gpcd

These figures show water use is well below the target 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 February through April. The contract operator performed weekly and monthly sampling for the treatment plant and wells.

	Capacity Factor	Average Flow Rate (FY Total)
March-19	58.95%	5308 gpm
April-19	59.78%	5380 gpm
May-19	71.8%	6462 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 a total of 7,000 acre-feet of Cyclic Storage Water by the end of this calendar year. BWP began spreading water on May 23, and spread about 395 acre-feet of water in the month of May. BWP plans to fulfill its obligation to spread 7,000 acre-feet by mid-August.

Seismic valve actuators were installed at Reservoirs #1 and #5 in May. The actuators automatically close isolation valves on the reservoirs during a seismic event to prevent the loss of stored water.

The annual testing and repair of all water meters 3” and larger (there are 102 of them) was completed in May, one month ahead of schedule. Regular testing of large meters is important because they measure a large percentage of the total water used.

Intersection of Winona and Ontario

Shown below is the installation of a new 12-inch potable water main on Winona Avenue, just south of Ontario to Hollywood Way. This project is part of the City’s Master Plan for water main replacement. The new 12-inch main will replace the existing 8-inch water main, which in turn, will be converted to deliver recycled water.





ELECTRIC RELIABILITY

In May 2019, BWP experienced three (3) sustained feeder outages. In the past twelve (12) months, automatic reclosing has reduced customer outage time by approximately 1,370,185 customer minutes.

Reliability Measurement	June 2017 – May 2018	June 2018 – May 2019
Average Outages Per Year (SAIFI)	0.5064	0.4844
Average Outage Duration (CAIDI)	26.15 minutes	33.04 minutes
Average Service Availability	99.998%	99.997%
Average Momentary Outages Per Year (MAIFI)	0.2005	0.3273
No. of Sustained Feeder Outages	9	14
No. of Sustained Outages by Mylar Balloons	2	2
No. of Sustained Outages by Animals	1	0
No. of Sustained Outages by Palm Fronds	0	3

PROJECT UPDATES

Naomi-15 4-12kV Conversion

The Naomi-15 pole line construction is in progress. BWP crews have set all 103 poles involved in this project. Property line work east of Florence St. is complete, and remaining work will be completed by early July 2019. Conversion to 12kV is anticipated to be complete by mid-July 2019.



N-15 Alley Work



N-15 Property Line Transfer of Facilities

4 kV Circuit Breaker Replacement for Winona A-2 Transformer

BWP has 129 substation circuit breakers for its 4 kV distribution system. Circuit breakers start or interrupt the flow of electricity in a circuit. The 4kV circuit breakers are used to prevent equipment damage by isolating electrical faults that are commonly caused by Mylar balloons and palm fronds. Through condition assessment, BWP will replace a circuit breaker if it is found to be in poor condition. In accordance with the Electric Distribution Master Plan, BWP has budgeted annual

funds to replace station circuit breakers, as deemed necessary, to ensure personnel safety and system reliability.

The 4 kV oil-filled circuit breaker (OCB) used for isolating the Winona A-2 transformer was not opening as quickly as originally designed when it was first commissioned in the 1950s. Additional maintenance on this circuit breaker was not able to improve the operation speed to acceptable limits. As such, this OCB was replaced with a 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 OCB



New 4kV VCB

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, 55.79% of the total streetlight luminaires have been converted to LEDs, which translates to an annualized energy savings of 2,857MWh or a 30.82% reduction in energy consumption. LED conversions have also reduced evening load by 652kW, which shortens the “neck of the duck curve” and reduces the amount of energy generation that BWP needs.

CUSTOMER SERVICE

Online Account Manager

The month of May continued to show an increase in the adoption of the Online Account Manager (OAM). In the three months since the launch, over 50% of active accounts have registered for the OAM. This figure is significant in our industry. Of all registered accounts, over 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.

As expected, BWP received an increase in customer contacts from the various channels (phone center, in person, email, and social media). The influx of contacts did cause longer than expected wait times. Although BWP did have additional resources in place via a dedicated OAM phone line, customers still experienced long wait times, due to the complexity of the calls and walking customers through the new platform. 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, a mobile app (iOS, Android), and other features to improve the customer experience.

Below is the chart outlining activity for the Online Account Manager:

	Mar-19	Apr-19	May-19	Total	% of Total*
Registered Accounts	18,498	6,317	3,052	27,867	53%
Paperless	17,047	5,704	3,045	25,796	49%
Autopay	2,354	2,376	1,170	11,693	22%

* Percent as compared to all active BWP accounts.

Below is the chart outlining call volume since the launch of the Online Account Manager:

	Mar-19	Apr-19	May-19	%Inc/Dec
Call Volume	7227	5740	6310	10%

Call Types	% of Calls
Balance	33%
Account/PIN #	12%
Credit Card line	9%
Payment Extension	7%
Other	39%

Electric Vehicle (EV) Charging Program

45 public EV charging stations are in service, including 2 DC Fast Chargers and 18 curbside stations. As of November 1, 2018, Time of Use (TOU) pricing for public EV charging is 17.36 cents per kilowatt-hour (kWh) for Level 1 and Level 2 charging during all hours. For the DC Fast Chargers, the charging rate is 28.17 cents per kWh. Staff continues to monitor usage and maintenance issues.

Month of usage	Usage in kWh	Gross Revenue	GHG reduced in kg	kWh/ Station/ Day	% Peak Sessions	Parking Occupancy	Charging Occupancy
May 2019	25,756	\$4,783	10,818	19.3	21%	26%	22%
April 2019	26,501	\$4,981	11,131	20.5	21%	25%	20%
Mar 2019	24,810	\$4,507	10,420	18	20%	21%	17%
Feb 2019 ⁵	20,127	\$3,277	8,453	17	23%	21%	17%
Jan 2019	20,706	\$3,511	8,696	16	22%	22%	18%
Dec 2018	22,889	\$3,991	9,613	18	21%	24%	19%
Nov 2018 ⁴	22,145	\$3,879	9,301	18	20%	25%	20%
Oct 2018 ³	23,141	\$3,957	9,719	18	20%	24%	21%
Sep 2018 ³	18,592	\$3,665	7,809	17	18%	23%	20%
Aug 2018	18,613	\$3,757	7,818	23	21%	27%	23%
July 2018	19,352	\$3,909	8,128	23	19%	28%	24%
Jun 2018 ¹	18,561	\$3,697	7,796	22	20%	29%	24%
May 2018	20,512	\$3,695	8,615	24	19%	32%	27%
Apr 2018	20,643	\$3,729	8,670	25	20%	30%	25%
Mar 2018	19,414	\$3,459	8,154	22	21%	26%	22%
Feb 2018	19,884	\$3,666	8,351	25	21%	30%	25%
Jan 2018	24,790	\$4,927	10,412	29	21%	30%	24%
Dec 2017	24,402	\$4,757	10,249	28	21%	30%	24%
Nov 2017 ²	21,410	\$3,996	8,992	26	21%	29%	24%
Oct 2017	23,000	\$4,828	9,660	27	20%	32%	27%
Sep 2017	20,755	\$4,307	8,717	25	20%	31%	25%
Aug 2017	22,207	\$4,669	9,327	26	23%	31%	26%
Jul 2017	22,981	\$4,845	9,652	27	22%	30%	25%

¹ The higher \$/kWh reflects the start of summer peak pricing for public EV charging.

² The lower \$/kWh reflects the end of summer peak pricing for public EV charging.

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

⁴ Includes the new DC Fast Charger and the removal of 2 chargers due to the Burbank Town Center project.

⁵ Includes 4 new Ontario Substation curbside chargers installed mid-February.

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
May 2019	10	88	787	7,889
April 2019	8	78	777	7,833
March 2019	11	70	769	7,788
February 2019	5	59	758	7,707
January 2019	15	54	753	7,677
December 2018	10	39	738	7,530
November 2018	6	29	728	7,375
October 2018	9	23	722	7,351
September 2018	5	14	713	7,289
August 2018	5	9	708	7,256
July 2018*	4	4	703	7,227
June 2018	8	99	699	7,112
May 2018	5	91	690	6,946
April 2018	9	86	685	6,911
March 2018	7	77	676	6,868
February 2018	5	70	669	6,832
January 2018	4	65	664	6,808
December 2017	9	61	660	6,777
November 2017	11	52	651	6,713
October 2017	13	41	640	6,630
September 2017	8	28	627	6,446
August 2017	15	20	619	6,405
July 2017*	5	5	604	6,302

* Start of new fiscal year.

TECHNOLOGY

Broadband Services (ONE Burbank)

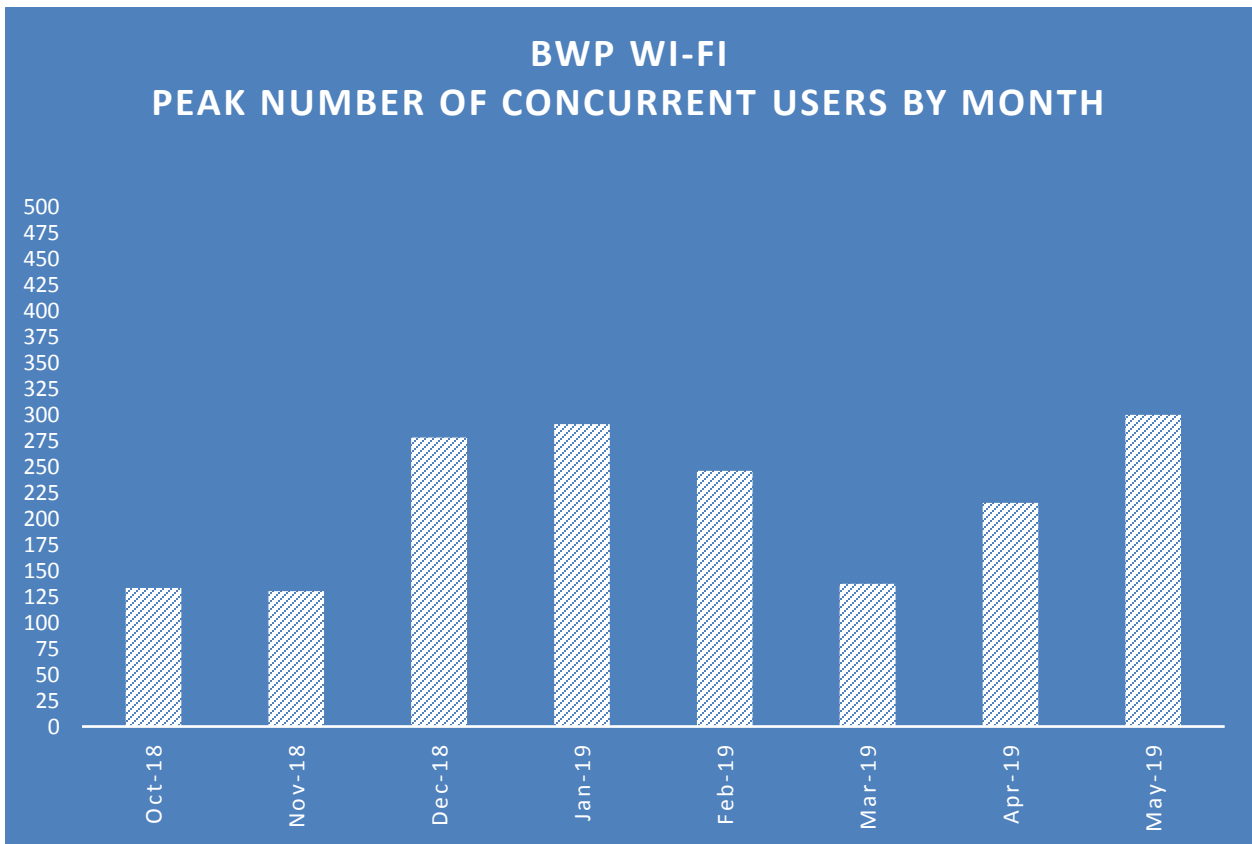
	May 2019 New Orders	Revenues for May 2019	FYTD 2018-19 Revenues	FYTD Budget
Lit	1	\$112,140	\$1,245,586	\$1,485,000
Dark	1	\$258,765	\$2,435,933	\$2,227,500
Total	2	\$370,905	\$3,681,519	\$3,712,500

BWP WiFi

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

BWP recently implemented new network security measures to safeguard and improve the reliability of BWP WiFi. These measures streamline overhead traffic and help to eliminate nefarious traffic. End users will experience a more robust, secure network, while BWP's metering assets that use the wireless networks will also be more secure.

Before these improvements, the number of peak users reported included active users as well as user devices that had disconnected from the network. Now, BWP is able to report just the number of users that are truly active and communicating to the internet (email, browsing, streaming, etc.) The reports going forward will provide a clearer and more accurate picture to gauge actual usage of BWP WiFi.

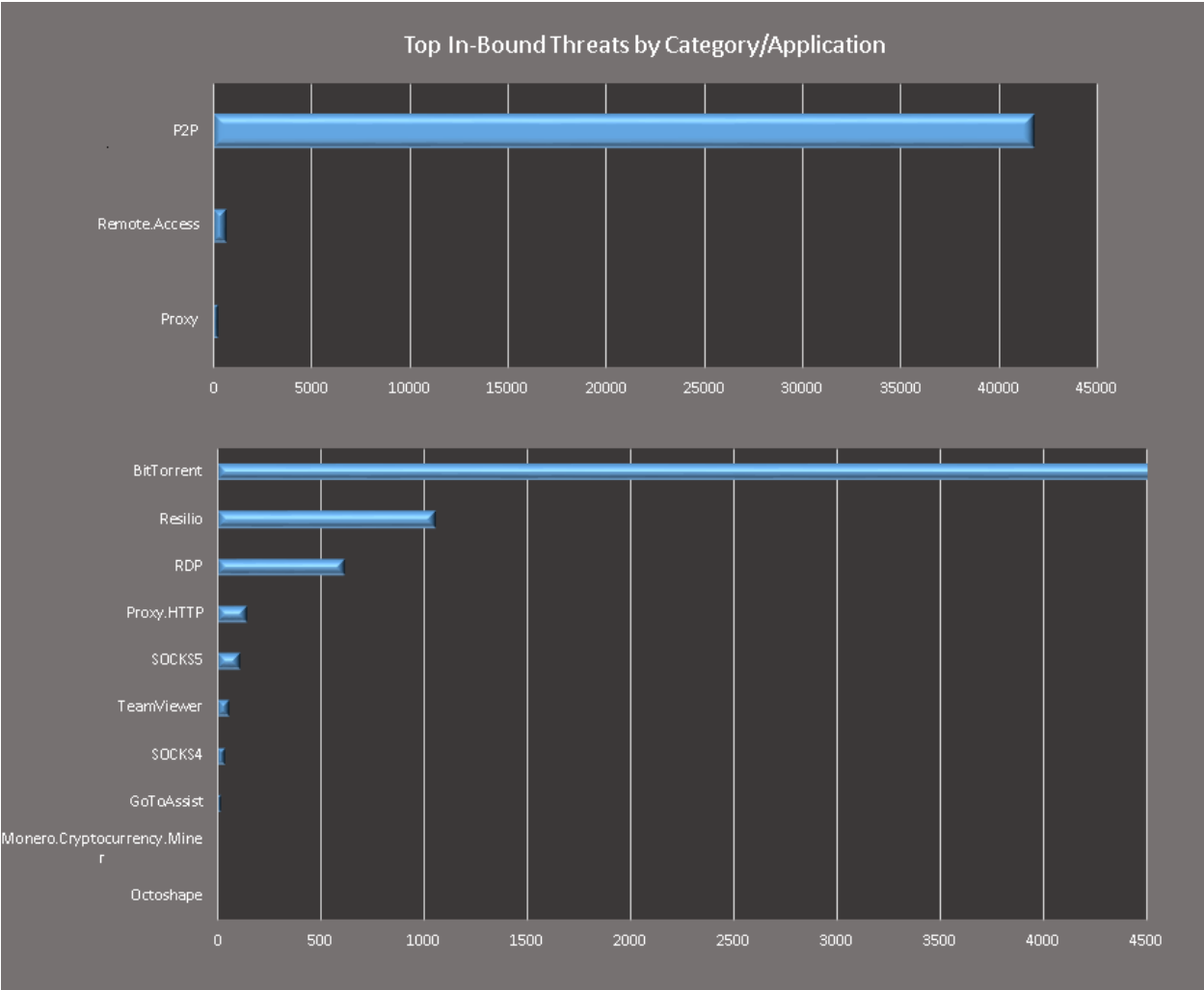


Cyber Security Update – May 2019

The BWP cyber security risk factor was 2.3 out of 5.0 for the month of May. Operational Technology successfully prevented over 40 million cyber security threats of which over 54% were elevated but only 0.01% were critical.

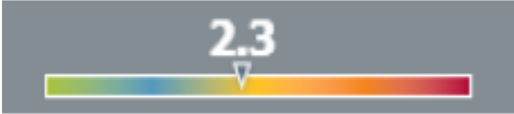


In-bound cyber threats by source location



Top In-bound cyber threats by category/application

RISK FACTOR

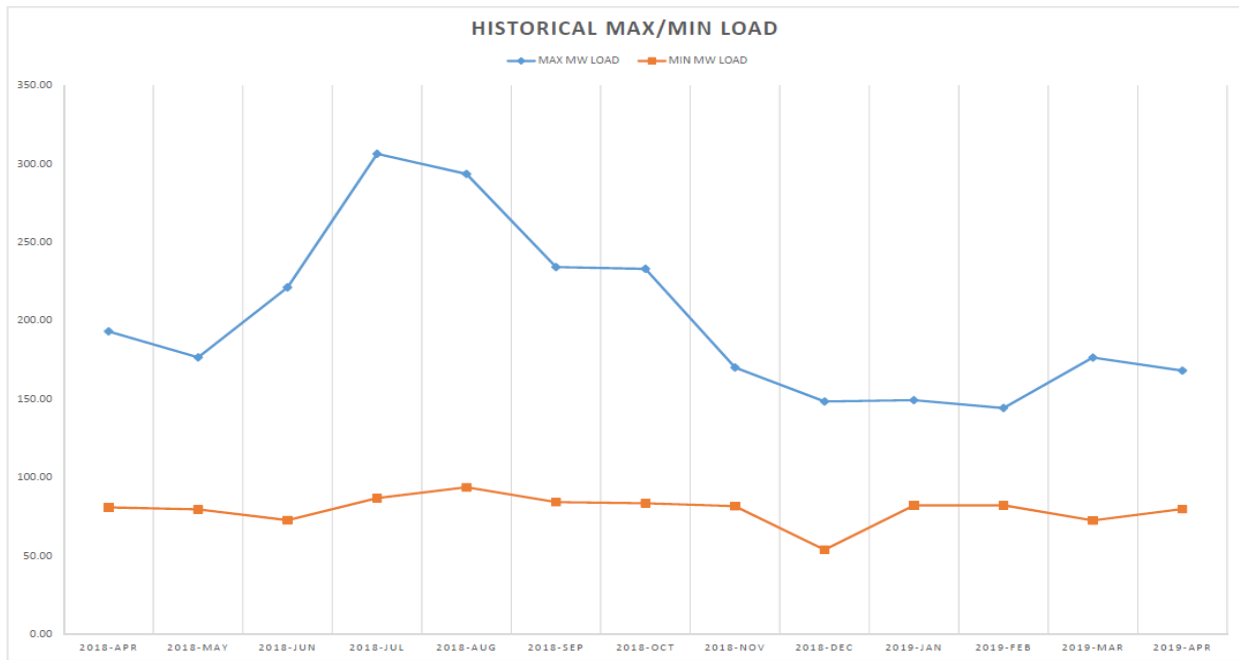


RISK FACTOR: The risk levels (1=lowest to 5=highest) indicate the application’s relative security risk based on a variety of factors and criteria such as whether the application can share files, is prone to misuse, or tries to evade firewalls.

POWER SUPPLY

BWP SYSTEM OPERATIONS:

The maximum load for May 2019 was 155.8 MW at 4:52 PM on Thursday, May 30, and the minimum load was 78.4 MW at 2:36 AM on Tuesday, May 28.



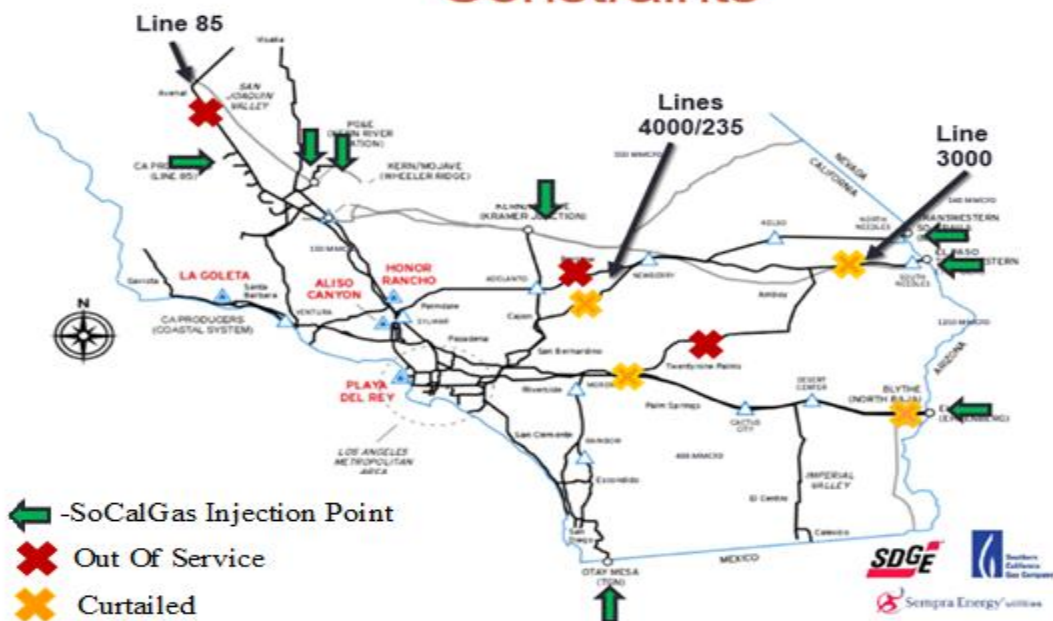
YEAR	MAX LOAD	MAX DATE
2018	306.3 MW	06-Jul-18 16:41:28
2017	329.36 MW	01-Sep-17 15:34:00
2016	308.52 MW	20-Jun-16 16:46:20
2015	306.23 MW	09-Sep-15 15:42:00
2014	316.68 MW	16-Sep-14 15:52:04

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

Los Angeles Department of Water and Power (LADWP) is joining the Reliability Coordinator (RC) West on July 1, 2019. BWP being in LADWP's Balancing Authority area will be part of this switch. BWP has been working with LADWP on their data request so they can map our system at a more granular level.

The Southern California area 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 and more readily addressed component is storage operating constraints resulting from the CPUC's November 2, 2017 Aliso Canyon Withdrawal Protocol restricting the use of the Aliso Canyon.

SoCalGas System Receipt Points and Constraints



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.

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.

The latest preliminary estimated return to service date is July 29 at a reduced pressure. This date is preliminary, and it may change as more information is obtained. Once Line 235-2 is returned to service, SoCalGas will in-line inspect Line 235-2 again.

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 on September 17, 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 and overcoming significant environmental challenges.

SoCal Gas Storage Capacity

With regard to Aliso Canyon, there were 22 days of withdrawal from January through March 2019. SoCalGas only gives a total storage inventory report. Over the spring, they have been injecting into all of their storage facilities including Aliso Canyon.

ELECTRICITY GENERATION:

BWP Generating Facilities

Unit	Availability	Operating Hrs	MWH (Net)	NO_x, lbs.
Olive 1	0%	0	0	0
Olive 2	0%	0	0	0
Lake 1	72%	0	0	10
MPP	92%	684	121,850	5,115

Olive 1 and 2 remained in dry storage, with a 45-day notice required to restart. Olive 1 and 2 have been in dry storage since 2011 and 2012, respectively.

Lake 1 was available for generation from May 9 to May 31. A planned 10-day maintenance outage occurred between April 29 and May 9. This included a borescope inspection and completion of General Electric Service Bulletin 310, which was a replacement of the high-pressure compressor blades, stages 3-5. Following the work, a full speed no load (no generation) test run was performed to ensure quality. Lake 1 was not placed online during the month.

Magnolia Power Project (MPP)

	May	FYTD	YTD
Availability	92%	95%	94%
Unit Capacity Factor (240 MW)	68%	72%	72%

MPP was shut down on May 17 for a scheduled offline water wash of the combustion turbine compressor. Several other outage related preventative maintenance items were completed during the outage. MPP was successfully restarted on May 20 and released to the Participants for dispatch 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. **Tieton generated 2,931 MWhs in May. Rimrock reservoir continued to rise in May and June so higher water supply and generation output is expected in the coming months.**

ENVIRONMENTAL

Air Quality

BWP has requested that the South Coast Air Quality Management District (SCAQMD) revise Lake One’s Title V Permit to Operate to allow two starts per day instead of the one start currently allowed. This revision would enhance operational flexibility, in particular, to decrease the need to operate Lake One for more hours than is operationally necessary during a single day. **BWP received the revised Lake One Title V Permit on May 21 and two starts per day are now available for use.**

In addition, BWP is currently preparing to renew the Title V Operating Permits for BWP and MPP generating units. The renewal application packages are being prepared for submission to the SCAQMD and the Environmental Protection Agency (EPA). The permits will cover a five-year operating period.

Storm Water

The Stormwater Resources Control Board, Industrial General Permit, requires industrial facilities to collect, at a minimum, four storm water samples per reporting year (July 1-

June 30) and compare them to statewide regulatory limits. BWP has met this requirement and no additional samples are necessary this reporting year. The analytical results from the storm water samples taken during the current reporting year continue to indicate elevated levels of metals (specifically iron, copper and zinc). Therefore, BWP continues to investigate additional best management practices to enhance storm water quality.

PROJECT UPDATES:

Power Resources

Transmission Update

Los Angeles Department of Water and Power (LADWP) implemented a new Open Access Transmission Tariff (OATT) effective September 1, 2017. The new OATT rates affect BWP’s cost for services purchased from LADWP under the Balancing Authority Area Services Agreement (BAASA). Changes to the BAASA’s cost of services resulting from the new OATT became effective on February 1, 2018.

Annual cost for services				
Service	FY 18/19 Under	FY 18/19 If	Variance	% Increase
	New OATT rates	Old OATT Rates		
BAASA Regulation & Frequency Response	\$871,952	\$604,350	(\$267,602)	44.3%
BAASA Contingency Reserves	\$3,462,962	\$3,224,186	(\$238,776)	7.4%
	\$4,334,914	\$3,828,536	(\$506,378)	13.2%

Staff is currently evaluating the new OATT, its impacts, and next steps.

Negotiations with LADWP, for several existing Transmission Service Agreements, including those regarding transmission service agreements associated with Hoover Dam and IPP generation resources are ongoing.

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 on April 2, 2019, in advance of the April 30 deadline. On May 14, the CEC issued its determination that BWP’s 2019 IRP is complete; the CEC’s review of BWP’s 2019 IRP for consistency with California energy and other policy goals is ongoing. The CEC should issue a final determination on consistency within 120 days from the date of filing.

Intermountain Power Project (Delta, UT) Renewal Progress

The Intermountain Power Project (IPP) participants involved with the repowering project have agreed to resize the proposed project to 840 MW, instead of the 1200 MW

contemplated earlier. This is being called the “alternative repowering.” This change came about because there is not enough definite interest amongst the renewal participants for 1200 MW of gas-fired capacity. LADWP believes the majority of the renewal project participants will assign their capacity interest back to LA, which would cause LADWP to be left with more generation than it requires. Resizing the project to 840 MW minimizes this risk, while still satisfying the projected needs of the participants. This change requires all existing participants of the renewal power sales agreement to amend both the original power sales agreement and the renewal power sales agreement to reflect the reimagined gas-fired project in Delta, UT.

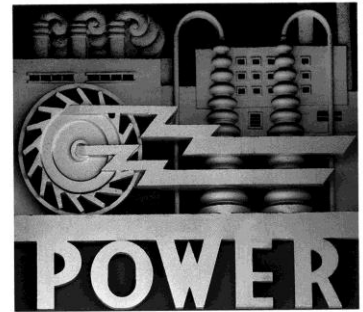
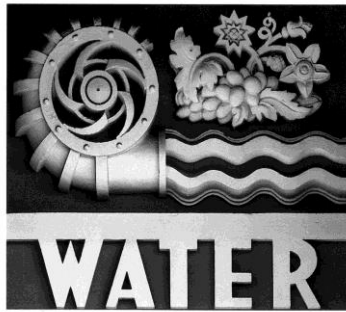
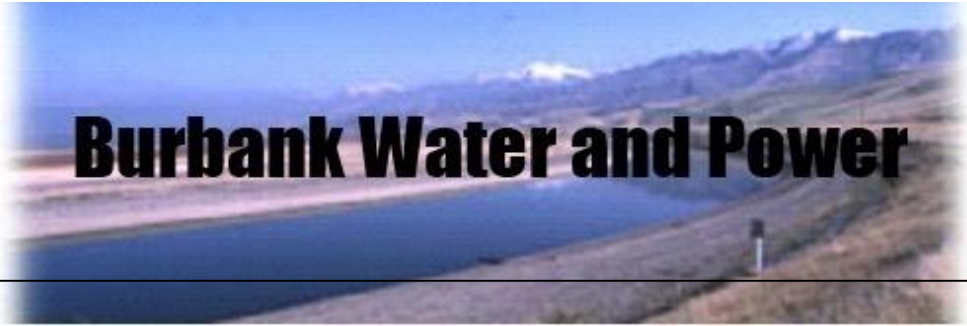
This resizing of the planned gas-fired power plant does not affect the transmission capacity associated with the project. However, because some current IPP participants have chosen not to participate in the renewal project, BWP’s potential Southern Transmission System (STS) capacity allocation (i.e. between Delta and Southern California) could potentially increase. If BWP chooses to participate in the repowering at its maximum allowable generation interest of 35 MW, BWP would be entitled to 127 MW of capacity on the STS, up from the 108 MW of STS capacity that BWP currently enjoys.

Burbank’s option to terminate or commit to the gas repowering must be decided, and communicated, to the Intermountain Power Agency in writing by August 3, 2019.

Power Generation

Landfill Gas to Energy Project

Civil design work has been completed, and the engineering package is being submitted for plan check. The construction contractor established a temporary construction trailer on site and removed portions of the old equipment in preparation for installation of the new equipment once received. The air permit application package was submitted to the AQMD on March 27. The permit engineer reviewed the submittal, drafted the permit wording and conditions, and sent it to BWP for review. BWP sent comments back to AQMD on June 5. AQMD has agreed to issue the air permit before August 2019; this meets the timetable in the Project Schedule, as planned for completion during the first quarter of 2020.



**Estimated Financial Report
May-19**

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

MTD FY 18-19	MTD May-19 Budget	\$ Variance ⁽³⁾	% Variance		FYTD FY 18-19	FYTD May-19 Budget	\$ Variance ⁽³⁾	% Variance
81,012	90,936	(9,924)	(11%) ^(a)	NEL MWh	1,010,070	1,047,123	(37,053)	(4%) ^(A)
				Retail				
\$ 11,797	\$ 13,211	\$ (1,414)	(11%)	Retail Sales	\$ 149,324	\$ 153,879	\$ (4,555)	(3%)
595	595	-	0%	Other Revenues ⁽⁴⁾	6,002	6,548	(546)	(8%) ^(B)
<u>8,653</u>	<u>9,495</u>	<u>842</u>	<u>9%</u> ^(b)	Retail Power Supply & Transmission	<u>99,079</u>	<u>103,978</u>	<u>4,898</u>	<u>5%</u> ^(C)
3,739	4,312	(573)	(13%)	Retail Margin	56,247	56,449	(202)	(0%)
				Wholesale				
506	3,227	(2,721)	(84%)	Wholesale Sales	13,553	43,536	(29,983)	(69%)
<u>427</u>	<u>3,147</u>	<u>(2,719)</u>	<u>(86%)</u>	Wholesale Power Supply	<u>12,121</u>	<u>42,448</u>	<u>30,327</u>	<u>71%</u>
79	81	(2)	(2%)	Wholesale Margin	1,432	1,088	343	32%
<u>3,818</u>	<u>4,393</u>	<u>(574)</u>	<u>(13%)</u>	Gross Margin	<u>57,679</u>	<u>57,538</u>	<u>141</u>	<u>0%</u>
				Operating Expenses				
888	888	-	0%	Distribution	9,145	10,102	957	9% ^(D)
107	107	-	0%	Administration/Safety	1,139	1,297	158	12% ^(E)
270	270	-	0%	Finance, Fleet, & Warehouse	2,207	3,042	835	27% ^(F)
499	499	-	0%	Transfer to General Fund for Cost Allocation	5,492	5,494	1	0%
392	392	-	0%	Customer Service, Marketing & Conservation	3,842	4,658	816	18% ^(G)
365	365	-	0%	Public Benefits	3,947	4,255	309	7% ^(H)
219	219	-	0%	Security/Oper Technology	1,969	1,863	(106)	(6%)
109	109	-	0%	Telecom	1,031	1,229	198	16% ^(I)
166	166	-	0%	Construction & Maintenance	1,412	1,824	412	23% ^(J)
<u>1,567</u>	<u>1,567</u>	<u>-</u>	<u>0%</u>	Depreciation	<u>16,469</u>	<u>17,233</u>	<u>764</u>	<u>4%</u>
4,582	4,582	-	0% ^(c)	Total Operating Expenses	46,653	50,997	4,344	9%
<u>\$ (764)</u>	<u>\$ (190)</u>	<u>\$ (574)</u>	<u>(302%)</u>	Operating Income/(Loss)	<u>\$ 11,026</u>	<u>\$ 6,541</u>	<u>\$ 4,485</u>	<u>69%</u>

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

(\$ in 000's)								
MTD FY 18-19	MTD May-19 Budget	\$ Variance ⁽³⁾	% Variance		FYTD FY 18-19	FYTD May-19 Budget	\$ Variance ⁽³⁾	% Variance
\$ (764)	\$ (190)	\$ (574)	(302%)	Operating Income/(Loss)	\$ 11,026	\$ 6,541	\$ 4,485	69%
				Other Income/(Expenses)				
181	181	-	0%	Interest Income	2,011	1,993	18	1%
125	125	-	0%	Other Income/(Expense) ⁽⁵⁾	1,382	1,380	2	0%
(361)	(361)	-	0%	Bond Interest/ (Expense)	(3,975)	(3,975)	(0)	(0%)
(55)	(55)	-	0%	Total Other Income/(Expenses)	(581)	(601)	21	3%
(819)	(245)	(574)	(235%)	Net Income	10,445	5,939	4,506	76%
473	473	-	0%	Capital Contributions (AIC)	1,084	3,355	(2,272)	(68%) ^(K)
<u>\$ (346)</u>	<u>\$ 228</u>	<u>\$ (574)</u>	<u>252%</u>	Net Change in Net Assets (Net Income)	<u>\$ 11,529</u>	<u>\$ 9,295</u>	<u>\$ 2,234</u>	<u>24%</u>

1. After the passing of Measure T in June 2018, electric utility bills now reflect a separate line item in the amount of the utility transfer to the City. Reported electric retail revenues and expenses on the utility's financial statements do not reflect the transfer; and the transfer no longer impacts the utility's financial results. This change in financial reporting took effect with July 2018 financial reporting and should be taken into account when comparing results to prior periods.
2. This report may not foot due to rounding.
3. () = Unfavorable
4. 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.
5. Other Income/(Expense) includes miscellaneous revenue from the sale of scrap materials, inventory, and assets, as well as BABS subsidy.

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

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
a.	Electric Usage in MWh	81,012	90,936	(9,924)	- NEL is 11% lower than budget due to more moderate weather. For the month of May average high temperature was 70.2°F and the 15 year average high temperature was 76.0°F. MTD CDD were 4 versus the 30 year average of 75.
b.	Retail Power Supply & Transmission	8,653	9,495	842	- The favorable variance is attributable to various components within Retail Power Supply & Transmission, including less renewable energy than planned and economic dispatch. Please refer to page A-5 for additional details.
c.	Total Operating Expenses	4,582	4,582	-	- Expenses for May 2019 are estimated at budgeted values.

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

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation
A.	Electric Usage in MWh	1,010,070	1,047,123	(37,053)	- NEL is 4% lower than budget due to conservation. FYTD average high temperature was 76.9°F and the 15 year average high temperature was 77.4°F. FYTD CDD were 1,304 versus the 30 year average of 1,223.
B.	Other Revenues	6,002	6,548	(546)	- 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	99,079	103,978	4,898	- The favorable variance is attributable to various components within Retail Power Supply & Transmission, including prior period true up credits and lower than planned O&M expenses. Please refer to page A-6 for additional details.
D.	Distribution	9,145	10,102	957	The favorable variance is primarily attributable to savings for salaries and related benefits due to vacant positions and the performance of more work than planned, including capital work, for other groups. The favorable variance is partially offset by higher than planned overtime expenses.
E.	Administration/Safety	1,139	1,297	158	- The favorable variance is primarily due to lower than planned spending on professional services.
F.	Finance, Fleet, & Warehouse	2,207	3,042	835	- The favorable variance is primarily attributable to budgetary savings on software, salaries and related benefits due to vacant positions, and professional services.
G.	Customer Service, Marketing & Conservation	3,842	4,658	816	- The favorable variance is primarily attributable to savings for professional services and software costs. Also contributing to the favorable variance is lower than planned spending on salary and related benefits due to vacant positions.
H.	Public Benefits	3,947	4,255	309	Lifeline discounts of \$418K YTD are recorded as a reduction to retail sales but are budgeted as an expense. The balance of the variance is attributable to lower than planned electric retail sales.
I.	Telecom	1,031	1,229	198	- The favorable variance is primarily attributable to the performance of more work than planned for other groups. Also contributing to the favorable variance are lower than planned spending on software and private contractual services.
J.	Construction & Maintenance	1,412	1,824	412	- The favorable variance is due to facility maintenance and servicing requests being less than planned.
K.	Capital Contributions (AIC)	1,084	3,355	(2,272)	- The unfavorable variance is primarily attributable to the timing of AIC projects.

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

	Variance Month-to-Date		Budget to Actual Variance
	Favorable Items	Unfavorable Items	
<u>MTD NET INCOME/(LOSS): (\$819)</u>		\$ (574)	\$ (574)
<u>MTD GROSS MARGIN VARIANCE</u>			
Retail Sales		(1,414)	(1,414)
Other revenues			-
Power Supply and Transmission			
- Less renewable energy than planned	364		364
- Lower energy prices and economic dispatch	337		337
- Lower retail load	279		279
- Higher transmission expenses than planned		(138)	(138)
Wholesale Margin		(2)	(2)
Total	980	(1,554)	(574)

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

	Footnote	Variance Fiscal Year-to-Date		
		Favorable Items	Unfavorable Items	Budget to Actual Variance
<u>FYTD NET INCOME: \$10.445</u>		4,506		4,506
<u>FYTD GROSS MARGIN VARIANCE</u>				
Retail Sales			(4,555)	(4,555)
Power Supply and Transmission				
- Prior period true up credits	A	2,245		2,245
- Lower than planned O&M expenses		1,311		1,311
- Lower retail load		1,073		1,073
- Less renewable energy than planned		885		885
- Lower than planned transmission expenses		441		441
- Sale of fuel and avoided fuel costs as a result of a planned MPP outage		361		361
- A ten day unplanned outage at IPP			(630)	(630)
- An unplanned outage at MPP			(531)	(531)
- Energy and fuel price variances, net of economic dispatch			(257)	(257)
Wholesale Margin		343		343
Other Revenues			(546)	(546)
Total		<u>6,659</u>	<u>(6,519)</u>	<u>140</u>
<u>FYTD EXPENSE AND OTHER VARIANCES</u>				
Distribution		957		957
Finance, Fleet, & Warehouse		835		835
Customer Service, Marketing & Conservation		816		816
Construction & Maintenance		412		412
Depreciation expense		764		764
All other		582		582
Total		<u>4,366</u>	<u>-</u>	<u>4,366</u>
FOOTNOTE A				
		Favorable Items	Unfavorable Items	Total
<u>FYTD TRUE-UP CREDITS</u>				
MPP		1,442		1,442
Palo Verde		526		526
Prepaid Gas		281		281
SCPPA Natural Gas		157		157
Tieton Hydro		141		141
Mead-Phoenix		77		77
Ameresco Chiquita		25		25
Wild Rose (Don Campbell)		26		26
Mead-Adelanto		15		15
STS			(62)	(62)
IPP			(383)	(383)
Total		<u>2,690</u>	<u>(445)</u>	<u>2,245</u>

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

	<u>May-19</u>	<u>Apr-19</u>	<u>Mar-19</u>	<u>Dec-18</u>	<u>Jun-18</u>	<u>Recommended Reserves</u>	<u>Minimum Reserves</u>
Cash and Investments							
General Operating Reserve	\$ 65,949 ^(b)	\$ 71,553	\$ 71,956	\$ 76,141	\$ 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	16,785	16,733	16,713	16,648	16,492		
Sub-Total Cash and Investments	<u>92,734</u>	<u>98,286</u>	<u>98,669</u>	<u>102,789</u>	<u>105,485</u>	<u>73,010</u>	<u>42,770</u>
Capital Commitments			-	(266)	(6,740) ^(c)		
Customer Deposits	(5,624)	(5,436)	(5,471)	(5,266)	(5,432)		
Public Benefits Obligation	(6,220)	(6,374)	(6,408)	(6,359)	(5,549)		
Pacific Northwest DC Intertie	(2,218)	(2,218)	(3,175)	(5,113)	(7,455)		
Low Carbon Standard Fuel ^(d)	(1,122)	(1,122)	(1,140)	(1,242)	(1,251)		
Cash and Investments (less Commitments)	<u><u>77,550</u></u>	<u><u>83,136</u></u>	<u><u>82,474</u></u>	<u><u>84,542</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.

**Burbank Water and Power
Water Fund (497)
Estimated Statement of Changes in Net Assets ⁽¹⁾
MTD and FYTD May 2019
(\$ in 000's except Gallons)**

MTD FY 18-19	MTD May-19 Budget	\$ Variance ⁽²⁾	% Variance		FYTD FY 18-19	FYTD May-19 Budget	\$ Variance ⁽²⁾	% Variance
406	408	(3)	(1%)	Water put into the system in Millions of Gallons	4,641	4,697	(56)	(1%) ^(A)
71	83	(12)	(14%) ^(a)	Metered Recycled Water in Millions of Gallons	854	911	(57)	(6%) ^(B)
Operating Revenues								
1,940	2,075	\$ (134)	(6%) ^(b)	Potable Water	24,253	24,861	\$ (608)	(2%) ^(C)
274	335	(62)	(18%) ^(c)	Recycled Water	3,380	3,681	(301)	(8%) ^(D)
39	52	(13)	(25%) ^(d)	Other Revenue ⁽³⁾	668	713	(45)	(6%)
<u>2,253</u>	<u>2,462</u>	<u>(209)</u>	<u>(8%)</u>	Total Operating Revenues	<u>28,301</u>	<u>29,255</u>	<u>(953)</u>	<u>(3%)</u>
884	947	63	7% ^(e)	Water Supply Expense	10,657	10,813	156	1%
<u>1,369</u>	<u>1,515</u>	<u>(146)</u>	<u>(10%)</u>	Gross Margin	<u>17,644</u>	<u>18,442</u>	<u>(798)</u>	<u>(4%)</u>
Operating Expenses								
605	605	-	0%	Operations & Maintenance - Potable	6,449	6,723	274	4% ^(E)
150	150	-	0%	Operations & Maintenance - Recycled	1,391	1,668	277	17% ^(F)
199	199	-	0%	Allocated O&M	1,906	2,197	291	13% ^(G)
169	169	-	0%	Transfer to General Fund for Cost Allocation	1,835	1,860	25	1%
348	348	-	0%	Depreciation	3,614	3,828	214	6%
<u>1,472</u>	<u>1,472</u>	<u>-</u>	<u>0%</u> ^(f)	Total Operating Expenses	<u>15,195</u>	<u>16,275</u>	<u>1,080</u>	<u>7%</u>
Other Income/(Expenses)								
16	16	-	0%	Interest Income	231	173	59	34% ^(H)
44	44	-	0%	Other Income/(Expense) ⁽⁴⁾	533	489	44	9%
(160)	(160)	-	0%	Bond Interest/(Expense)	(1,751)	(1,755)	4	0%
<u>(99)</u>	<u>(99)</u>	<u>-</u>	<u>0%</u>	Total Other Income/(Expenses)	<u>(987)</u>	<u>(1,094)</u>	<u>107</u>	<u>10%</u>
<u>(202)</u>	<u>(56)</u>	<u>(146)</u>	<u>(260%)</u>	Net Income/(Loss)	<u>1,462</u>	<u>1,073</u>	<u>389</u>	<u>36%</u>
28	28	-	0%	Aid in Construction	323	306	17	6%
<u>\$ (174)</u>	<u>\$ (28)</u>	<u>\$ (146)</u>	<u>(517%)</u>	Net Change in Net Assets (Net Income)	<u>\$ 1,785</u>	<u>\$ 1,379</u>	<u>\$ 406</u>	<u>29%</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.

**Burbank Water and Power
Water Fund (497)
Estimated Statement of Changes in Net Assets - Footnotes
MTD May 2019
(\$ in 000's except Gallons)**

Foot-note #	Accounts/Description	Actual	Budget	Variance to Budget	Explanation	
a.	Recycled Water Usage in Millions of Gallons	71	83	(12)	- Recycled water sales are lower due to lower irrigation. Monthly rainfall was 0.89 inches versus the monthly normal of 0.35 inches. For the month of May average high temperature was 70.2°F and the 15 year average high temperature was 76.0°F. MTD HDD were 117 versus the 30 year average of 53.	
b.	Potable Water Revenue	1,940	2,075	(134)	- The WCAC impact decreased potable water revenues by \$76k MTD. Without this adjustment, potable water revenues would be unfavorable by 3%.	
						MTD Actual
					WCAC Revenue	\$ 959.22
					WCAC Expenses	\$ 882.80
					WCAC revenue deferral/(accrual)	\$ 76
c.	Recycled Water Revenue	274	335	(62)	- MTD Recycled water revenue corresponds with the demand.	
d.	Other Revenue	39	52	(13)	- Other revenues include items such as damaged property recovery, connection fees, late fees, and tampering fees, which tend to fluctuate.	
e.	Water Supply Expense	884	947	63	- Water supply expense is lower because of lower demand and is further enhanced by using less MWD water than planned.	
f.	Total Operating Expenses	1,472	1,472	-	- Expenses for May 2019 are at budgeted values.	

Burbank Water and Power
Water Fund (497)
Estimated Statement of Changes in Net Assets - Footnotes
FYTD May 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	4,641	4,697	(56)	- FYTD Potable water sales are slightly lower due to lower demand. Rainfall season-to-date was 18.86 inches versus the season normal of 17.2 inches. FYTD CDD were 1,304 versus the 30 year average of 1,223.
B.	Metered Recycled Water in Millions of Gallons	854	911	(57)	- FYTD Recycled sales are lower due to lower demand for landscaping irrigation. Rainfall season-to-date was 18.86 inches versus the season normal of 17.2 inches. FYTD CDD were 1,304 versus the 30 year average of 1,223.
C.	Potable Water	24,253	24,861	(608)	- The WCAC impact decreased potable water revenues by \$70k YTD. Without this adjustment, potable revenues would be unfavorable by 2%.
					FYTD Actual
					WCAC Revenue
					<u>10,725.58</u>
					WCAC Expenses
					<u>10,655.99</u>
					WCAC revenue deferral/(accrual)
					<u>\$ 70</u>
D.	Recycled Water	3,380	3,681	(301)	- FYTD Recycled water revenue is unfavorable due to lower demand.
E.	Operations & Maintenance - Potable	6,449	6,723	274	- The favorable variance is primarily attributable to budgetary savings on salaries and related benefits due to vacant positions and lower than planned spending on professional services.
F.	Operations & Maintenance - Recycled	1,391	1,668	277	- The favorable variance is primarily attributable to lower than planned spending on professional services, software & hardware, private contractual services, and lower than planned electricity for water pumping.
G.	Allocated O&M	1,906	2,197	291	- The favorable variance is attributable to lower than planned allocated expenses (Customer Service, Finance, and Construction & Maintenance) from the Electric Fund.
H.	Interest Income	231	173	59	- The favorable variance is attributable to higher cash through January 2019 and higher actual rate of return.

Estimated May 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): (\$202)</u>		(146)	(146)
<u>MTD GROSS MARGIN VARIANCE</u>			
Potable Revenues		(134)	(134)
Recycled Revenues		(62)	(62)
Water Supply Expense	63		63
Other Revenue		(13)	(13)
Total	<u>63</u>	<u>(209)</u>	<u>(146)</u>

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

	Variance Fiscal Year-to-Date		
	<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: \$1,462</u>	389		389
<u>FYTD GROSS MARGIN VARIANCE</u>			
Potable Revenues		(608)	(608)
Recycled Revenues		(301)	(301)
Other Revenue		(45)	(45)
Water Supply Expense	156		156
Total	<u>156</u>	<u>(954)</u>	<u>(798)</u>
<u>FYTD O&M AND OTHER VARIANCES</u>			
Allocated O&M	291		291
Recycled Water O&M	277		277
Potable O&M	274		274
Depreciation Expense	214		214
All Other	131		131
Total	<u>1,187</u>	<u>-</u>	<u>1,187</u>

**Burbank Water and Power
Water Fund (497)
Estimated Statement of Changes in Cash and Investment Balances ^(a)**

	<u>May-19</u>	<u>Apr-19</u>	<u>Mar-19</u>	<u>Dec-18</u>	<u>Jun-18</u>	<u>Recommended Reserves</u>	<u>Minimum Reserves</u>
Cash and Investments							
General Operating Reserves	\$ 10,379 ^(b)	\$ 5,996	\$ 5,800	\$ 12,471	\$ 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>12,599</u>	<u>8,216</u>	<u>8,020</u>	<u>14,691</u>	<u>13,145</u>	<u>17,830</u>	<u>9,370</u>
Customer Deposits	(1,182)	(1,182)	(1,266)	(1,170)	(607)		
Capital Commitments ^(c)	-	-	-	-	(140)		
Cash and Investments (less commitments)	<u><u>11,418</u></u>	<u><u>7,034</u></u>	<u><u>6,754</u></u>	<u><u>13,521</u></u>	<u><u>12,397</u></u>	<u><u>17,830</u></u>	<u><u>9,370</u></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.