Mission, Key Objectives, and Goals

Anaheim Public Utilities’ (APU) mission is to add value to the community through a customer-focused approach by providing reliable, high-quality water and power at competitive rates. To fulfill this mission, APU strives to meet six key objectives: sustain a high level of customer satisfaction, deliver daily operations excellence, preserve competitiveness and financial health, effectively manage enterprise risk, invest in a positive and productive work environment, and maintain alignment with the City of Anaheim’s (City) goals.

To assess its performance in meeting these six high level objectives, APU established meaningful performance goals that are tracked and reported. APU staff carefully evaluates each performance metric to determine how the utility is performing and whether certain processes or practices require closer monitoring or adjustment. To foster a culture of continuous improvement, APU will modify or replace goals as needed to ensure that the Utilities Success Indicators report is current, relevant, and moves APU forward into the future.

This report is an update on APU’s progress in meeting its key performance goals and covers the reporting period January 1, 2020 – June 30, 2020.

Notable Events in the Reporting Period

COVID-19 Response

In March, the City of Anaheim announced the public closure of City Hall to help protect the health of the community. During this time, APU’s remained fully operational and maintained communication with the public through its call center, social media, online chat, and email. To assist customers currently experiencing financial strain from COVID-19, APU is temporarily suspending utility service shut-offs and offering flexible payment plans and emergency bill assistance. Following the phased reopening of City Hall announced in June, APU began scheduling appointments for the public for customer service, programs and rebates, electric engineering, and water engineering inquiries. For additional details on how APU is helping the community and customers during this challenging time, see COVID-19 Customer Assistance.

Bond Refunding

In January, APU capitalized on low interest rates and refunded existing bonds, saving customers more than $67 million in future interest payments and shortening the term of the electric bond by seven years and the water bond by five years. Shortening the length of debt maximizes savings, provides APU with future flexibility, and helps pay down existing debt faster than originally anticipated – all without increasing annual debt service payments.
Wildfire Mitigation

During the reporting period, PUB and City Council approved APU’s 2020 Wildfire Mitigation Plan that establishes methods and procedures for constructing, maintaining, and operating APU electrical lines and equipment to minimize wildfire risk. The plan was developed in consultation with Anaheim Fire & Rescue and includes preventative strategies and actions to be taken during elevated weather conditions. Approximately 98% of city-owned power lines in the fire threat zones are currently underground, and efforts are already underway to underground Eucalyptus Drive, south of Santa Ana Canyon Road, because of its proximity to an elevated high fire threat zone.

APPA Reliable Public Power Provider Award

In May, the American Public Power Association recognized APU as a Platinum Level Reliable Public Power Provider (RP3). This three-year designation honors utilities that demonstrate high proficiency in reliability, safety, workforce development, and system improvement. Of the 2,000 public power utilities nationwide, only 274 currently hold the RP3 designation.

Arbor Day Recognition

The Arbor Day Foundation recently recognized APU as a Tree Line USA recipient, awarded to agencies who deliver clean and reliable energy while building a greener community. Through APU’s Tree Power program, residents and businesses can receive up to six shade trees at no cost. Well-situated and mature shade trees can reduce air conditioning use by 10% to 40%. Since the start of this program in 1992, APU has planted approximately 56,000 shade trees throughout Anaheim to help customers conserve energy and save money on their utility bills.

Sustainable Landscape Workshops

APU partnered with the Metropolitan Water District of Southern California to host a sustainable landscape workshop series prior to the onset of the coronavirus pandemic. Approximately 50 Anaheim residents attended the first workshop, which offered information on the benefits of alternative water-retaining landscapes, and showcased methods to reduce water, energy, and green-house gases. Workshop attendees learned about conservation rebates, received gardening guides and seed packets, and had the opportunity to win gardening supplies through a raffle. For safety reasons, the remaining workshops scheduled for this year will be held virtually. To register for this workshop series, visit www.anaheim.net/1062/Turf-Replacement-Program.
Water Awareness Month

During Water Awareness Month each May, APU typically promotes its water programs and rebates at a community event. Because of the pandemic, APU retooled this annual event as a virtual series called Water Wise Wednesdays, with weekly social media posts covering a variety of water conservation topics such as outdoor water use, leaky toilets, water tolerant landscaping, and smart irrigation controllers. To drive community participation, APU also held weekly raffles for an opportunity to win irrigation controllers and succulent arrangements. For each entry, participants shared the changes they made to become more “water wise” in their homes.

Key Capital Project Milestones

Below are key capital milestones that were completed during the reporting period.

Electric

- APU continued to replace older street lights with 1,760 efficient LED street lights in various neighborhoods, including Lakeview Ave. and La Palma Ave., Pioneer Park Neighborhood, James Madison Neighborhood, Thomas Jefferson School Neighborhood, Maxwell Park Neighborhood, and Olive St. from North St. to Lincoln Ave. New street lights were installed in the Albert St. and Ohio St. in downtown Anaheim, significantly improving visibility in the neighborhood.

- In May, construction began on the first phase of undergrounding Royal Oak Road, where the steep terrain makes it challenging for crews to access utility poles on these slopes. This project will underground approximately 1.2 circuit miles of overhead lines on Royal Oak Rd. from Santa Ana Canyon Rd. to Nohl Ranch Rd., Crescent Dr., and Cerro Vista Dr. – improving electric service reliability for residents and businesses.
Water

- For fiscal year 2019/20, APU installed a total of 2,285 feet of water mains on Fern Haven Ln., Hadrians Crescent, Pepper Creek Way, and along State College Blvd. The State College Blvd. water main project is being performed in coordination with a large sewer replacement project by the Orange County Sanitation District and is still under construction with completion anticipated by late 2020. This project will replace approximately 3,600 feet of water mains to improve system reliability and avoid having to impact paved streets with construction following the sewer project.

- The Linda Vista Complex Phase II improvements are currently underway with underground utility infrastructure and the pump station building foundation completed. Other project components that are in progress include replacing all existing pumps and upgrading electrical equipment. Project completion is planned for spring 2021.
Summary of Results for Reporting Period

This section provides a brief summary of APU’s performance in meeting or exceeding its goals during the reporting period. Following this section is the Appendix, which provides definitions, descriptions, and a more comprehensive analysis of APU’s performance during the reporting period.

### A. Sustain a High Level of Customer Satisfaction

<table>
<thead>
<tr>
<th>Employee Effectiveness</th>
<th><strong>Goal:</strong> Meet at least 85% of Anaheim Anytime survey respondents’ evaluation of employee effectiveness (with a rating of “good” or “superior”) in the categories of employee courtesy, time to respond, and employee effectiveness</th>
<th><strong>Result:</strong> All three measures were above the 85% target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Satisfaction</strong></td>
<td><strong>Goal:</strong> Meet or exceed at least 90% of Anaheim Anytime Survey respondents’ expectations</td>
<td><strong>Result:</strong> Over 90% of survey respondents’ expectations were met or exceeded</td>
</tr>
<tr>
<td><strong>Timely Customer Service</strong></td>
<td><strong>Goal:</strong> Respond to customer calls in the Utility Call Center in 3 minutes or less</td>
<td><strong>Result:</strong> Customer calls were answered within 1.7 minutes on average</td>
</tr>
<tr>
<td><strong>Timely Street Light Repairs</strong></td>
<td><strong>Goal:</strong> Ensure street light repairs are made within 4 business days on average</td>
<td><strong>Result:</strong> Street light repairs were completed within 2.1 business days on average</td>
</tr>
</tbody>
</table>
### Electric Reliability
**Goal:** Maintain electric system reliability indicators in the top 25% of the municipal utility category nationally
**Result:** APU was in the top 25% of public power agencies nationwide for outage duration, frequency of outages, and restoration time

### Renewable Portfolio
**Goal:** Procure adequate renewable resources to comply with state mandates on renewable portfolio standard, meet interim targets, and remain well-positioned for future compliance periods
**Result:** APU is in compliance with all applicable state mandates and is on-track to meet the RPS target of 33% by 2020 and the accelerated RPS target of 60% by 2030

### Generator Availability
**Goal:** Maintain electric generation availability rate at 95% or better
**Result:** Canyon Power Plant recorded a 99.2% average availability rate

### High Quality Drinking Water
**Goal:** Meet or exceed all state and federal drinking water quality standards.
**Result:** Drinking water quality met or exceeded all state and federal standards

### Water System Reliability
**Goal:** Minimize main breaks per 100 miles of pipe to under 8 annually, which is approximately 40% below the national average
**Result:** APU recorded 4.9 main breaks per 100 miles of pipe

### Water System Maintenance
**Goal:** Meet the three-year maintenance goal of exercising all 23,000 system valves (or 639 per month) and inspecting all 7,800 hydrants (or 217 per month)
**Result:** APU met its goal of inspecting all hydrants and exercising all system valves for the most recent three-year maintenance cycle ending June 30, 2020

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**B. Deliver Daily Operational Excellence**
## C. Preserve Competitiveness & Financial Health

### Competitive Electric Rates
**Goal:** Maintain annualized Electric rates below rates paid by other Orange County cities
**Result:** Annualized electric rates are at least 27% below rates paid by other Orange County cities

### Competitive Water Rates
**Goal:** Maintain annualized Water rates under the average of local agencies in the county
**Result:** Annualized water rates are approximately 23% below the average of local agencies in the county

### High Bond Ratings
**Goal:** Remain in the A rated or higher categories for bonds
**Result:** All bonds are currently rated A or above; this goal remains at Watch as APU develops strategies and tools for the Water Utility to regain its AAA rating from S&P

### Sufficient Liquidity
**Goal:** Maintain 90 Days + $50 million of cash on hand for Electric, and 120 days cash on hand for Water
**Result:** Both Electric and Water remained above their respective targets for days cash

### Strong Positive Cash Flow
**Goal:** Maintain debt service coverage ratio (DSCR) for Electric at 1.6 or higher, and for Water at 2.0 or higher
**Result:** As of June 30, 2020, Electric and Water Utility’s DSCR is projected at 1.7 and 1.8, respectively
D. Effectively Manage Enterprise Risk

Legislative & Regulatory Risk Management

Goal: Proactively identify and manage enterprise-wide risks so that all key risks are properly addressed or mitigated, and no material violations occur that would adversely affect APU’s operations or its assets

Result: No material violations or compliance issues arose and counterparty default risk was kept at 0%

E. Invest in a Positive & Productive Work Environment

Strong Safety Culture

Goal: Maintain an industrial safety and health injury rate that does not exceed 1.0

Result: The disabling injury rate was 0.29

Employee Efficiency

Goal: Meet or exceed industry benchmark for employee efficiency

Result: APU exceeded its employee efficiency benchmark with over 40% more electric customers per non-power generation employee and over 25% more water customers per water utility employee

F. Maintain Alignment with the City’s Goals

City Council, Public Utilities Board & City Manager Vision

Goal: Support City Council policies and initiatives, seek the Public Utilities Board’s recommendations and direction, and implement programs and projects at the City Manager’s direction

Result: APU continued to support and expand many City Council and City Manager policies and initiatives throughout the reporting period
A. SUSTAIN A HIGH LEVEL OF CUSTOMER SATISFACTION

1. Meet at least 85% of Anaheim Anytime survey respondents’ evaluation of employee effectiveness (with a rating of “good” or “superior”) in the categories of employee courtesy, time to respond, and employee effectiveness

**Detail:** APU strives to achieve high satisfaction ratings through its many customer interactions, which occur through the call center, at the service counter, in the field, and on phone calls or emails. Through Anaheim Anytime, an interactive customer service tool, APU customers can rate the service they received in categories like service effectiveness, quality of service, and timeliness of response. Each of these categories can be rated on a scale of poor, below average, average, good, or superior. This metric will focus on the percentage of responses rated “good” or better during the reporting period.

**Result:** Goal Met. For the reporting period, APU received a total of 199 Anaheim Anytime surveys and the percentage of responses that rated service effectiveness, quality of service, and time to respond with a rating of “good” or better was over 85%.

2. Meet or exceed at least 90% of Anaheim Anytime survey respondents’ expectations

**Detail:** Overall customer satisfaction is a barometer of whether APU is meeting the needs of its residential and business customers. Through Anaheim Anytime, APU customers have the opportunity to ask questions, submit a service request, communicate about an issue that needs service or immediate attention, and rate whether their service expectations were met. This metric will focus on the percentage of respondents that rated their expectations as being “met” or “exceeded” during the reporting period.

**Result:** Goal Met. Of the 199 respondents that completed an Anaheim Anytime survey during the reporting period, 95% indicated that their expectations had been met or exceeded. The...
most requested service during the reporting period were street light repairs, which made up 37% of the requests.

In October 2019, APU began tracking customer call satisfaction using its new automated phone survey. During the reporting period, over 1,100 customers participated in the phone survey – which is available to all callers who speak with a Utility Call Center representative – and 91% of survey participants indicated that the reason for their call had been resolved. As more survey results are collected, APU will establish a benchmark to measure customer satisfaction in the Utility Call Center, which handles over 17,000 phone calls each month.¹

### 3. Respond to customer calls in the Utility Call Center in 3 minutes or less

**Detail:** Customer Service Representatives (CSRs) in the Utility Call Center are trained APU staff members who strive for the highest quality of professionalism, effectiveness, and courtesy when answering customer phone calls. They are trained to provide answers and solutions to a number of issues relating to the customer’s utility account or any number of city-wide issues.

The customer wait time metric result is calculated by totaling the duration of minutes where customers experienced a wait before speaking to a representative during the reporting period and dividing this total by the number of calls answered in the same reporting period.² The monthly daily call volume is calculated by dividing the total number of calls answered during the month by the total number of full work days during that same month.³ Customers who call the Utility Call Center can choose to speak to a live representative within 10 – 50 seconds, depending on the menu option they choose from the Interactive Voice Response (IVR)⁴, which provides a selection of commonly requested, self-service options. Wait times begin immediately after a customer selects an IVR message option and ends when a service representative answers their call.

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¹ Average based on Utility-related calls answered for the Fiscal Year 2020

² This metric is calculated by taking the total call wait duration during the reporting period and dividing it by the total calls answered within that same period; this calculation also filters out customers who drop their call before speaking with a representative.

³ Similar to call wait times, the daily call volume calculation filters out calls that were dropped. Full work days in the calculation are for business weekdays only with at least 10.5 work hours.

⁴ The Interactive Voice Response (IVR) provides immediate self-service options for customers and may also alert customers to issues like fraudulent callers pretending to be utility employees. For more information on scammers targeting utility customers, including tips on how to avoid such scams, please see www.anaheim.net/4755/Scam-Alert.
In addition to utility calls, CSRs answer phone calls for the City’s 311 service, a non-emergency service allowing callers to report graffiti, submit code enforcement and community preservation requests, make general city-related inquiries, or follow-up on requests made through Anaheim Anytime. Wait times for 311 calls are typically much lower than Utility-related calls due to the lower call volume and because specific CSRs are assigned to answer these calls with urgency.

**Result:** Goal Met. Utility-related call wait times averaged 1.7 minutes during the reporting period. Between March and June, the average daily calls handled and average wait time dropped, likely because utility service shutoffs and late payments were temporarily suspended to help customers experiencing financial hardship from the pandemic.

During this reporting period, APU also promoted its customer chat feature on its social media platforms – as an alternative to calling customer service. Customers can chat with a live representative Monday through Friday from 9:00 am to 4:00 pm for their utility account service needs. To utilize this feature, visit [anaheim.net/3374/Customer-Service](http://anaheim.net/3374/Customer-Service).

Call wait times for the City’s 311 service averaged 1.0 minutes during the reporting period. Many 311 calls during the reporting period were for COVID-19 related topics such as City policies, programs, mask enforcement, and testing sites. For the latest City of Anaheim updates on COVID-19, please visit [www.anaheim.net/5454/Tracking-Coronavirus-Anaheim-Ready](http://www.anaheim.net/5454/Tracking-Coronavirus-Anaheim-Ready).
4. Ensure street light repairs are made within 4 business days on average

**Detail:** Repairing street lights promptly is a high priority for residents and businesses and is therefore tracked as its own metric. APU’s goal is to repair street lights within 4 business days on average. For many street light repairs, a light bulb and photo sensor are replaced – which is a straightforward and quick repair. However, more time may be required for wiring issues or infrastructure repairs or replacements.

**Result:** Goal Met. Over 760 street lights were repaired during the reporting period within 2.1 business days on average.

As of June 2020, LED lights make up roughly 61% or over 12,800 of Anaheim’s total street lights. Last year, APU identified LED solutions for other styles of street lights, which are located in designated central and east Anaheim roadways.
B. DELIVER DAILY OPERATIONS EXCELLENCE

1. Maintain electric system reliability indicators in the top 25% of the municipal owned utility category nationally

**Detail:** APU monitors its service reliability by tracking the following key reliability indicators against the top quartile of municipal utilities across the nation, as well as neighboring utilities.5

- **Duration of Outages:** The system average interruption duration index (SAIDI) is an indicator of system performance and reflects the integrity of the local electric grid. It measures the number of minutes over the year that the average customer is without power by dividing the total customer minutes out by the number of electric service customers.

- **Restoration Time:** The customer average interruption duration index (CAIDI) is an indicator of response time for every occurring outage, indicating how quickly power was restored to customers. It measures the average amount of time a customer is without power per interruption by dividing the total customer minutes out by the number of customer interruptions.

- **Frequency of Outages:** The system average interruption frequency index (SAIFI) is an indicator of system resilience, reflecting how often a typical customer is affected by an outage. It measures the number of times an average customer experiences an interruption by dividing the number of customer interruptions by the number of service customers.

**Result:** **Goal Met.** APU was in the top national quartile of the municipal owned utilities category for all three reliability indicators, with the average customer experiencing one outage every three years (0.29 SAIFI), lasting approximately 19.2 minutes on average (SAIDI), with power restored within 66.4 minutes on average (CAIDI). The charts below demonstrate how APU fares against neighboring utilities for all three reliability indices.

During the reporting period, Mylar balloons and underground cable failure comprised 23% and 20% of the total sustained outages, respectively. To mitigate such issues and improve electric system reliability, APU

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5 Benchmark data is provided by PA Consulting Group Inc. as part of their annual, national benchmarking study, consisting of over 150 participating electric utilities. PA Consulting Group Inc., "System Reliability, Restoration, and Response Report (SR3), Reliability Data for Calendar Year 2018". APU looks at neighboring utilities whenever publicly available data is available. Only sustained outages, defined here as those outages lasting 5 minutes or more, are included for comparison. Total system indices, which include distribution and transmission indices, are also used. Major event days from benchmark agencies are excluded for a more accurate comparison. Results from other agencies are from calendar year 2018, with the exception of PG&E and LADWP which have provided FY2019 and FY2020 results on their website, respectively.
continues to underground its overhead power lines and replace aged and degraded underground cable. Operationally, tree trimming, equipment inspections, patrols, and installation of automation have helped improve overall system reliability.

2. Procure adequate renewable resources to comply with state mandates on renewable portfolio standard, meet interim targets, and remain well-positioned for future compliance periods Detail:

APU remains committed to reducing greenhouse gas emissions through increasing its renewable resources while lowering more carbon-intensive resources like coal in its power resources portfolio. State legislation requires a 33% renewable portfolio standard (RPS) by
2020, 60% RPS by 2030, and 100% carbon-free energy by 2045. California’s governor signed the last two provisions into law (known as SB 100) on September 10, 2018.

APU’s outlook includes the replacement of the Intermountain Power Project (IPP) coal and gas units with renewable resources by 2030; and the replacement of the Canyon (CPP) and Magnolia gas units with carbon-free or renewable resources by 2045.

For a detailed breakdown of APU’s accomplishments and highlights addressing greenhouse gas emissions, visit www.anaheim.net/5507/Greenhouse-Gas-Reduction to view APU’s 2020 Greenhouse Gas Reduction Plan, that includes comments about sustainability initiatives from Anaheim high school students.

**Result:** Goal Met. APU’s renewable portfolio standard (RPS) is currently at 33%, and remains on track to meet RPS goals in compliance with state mandates.

3. **Maintain generation availability rate at 95% or better**

**Detail:** Generation availability is a barometer of reliability, indicating the percentage of time the power plant is available to operate and generate power. While the long-term goal is to phase out of carbon-based resources, today’s influx of intermittent solar and wind requires the ability to integrate renewables, especially as solar comes offline in the evening timeframe. This metric is calculated by dividing the total number of hours the plant is available to operate by the total number of hours in the reporting period. Results of generation availability will be provided for Canyon Power Plant (Canyon) since Kraemer Power Plant (Kraemer) is no longer operational.

**Result:** Goal Met. During the reporting period, Canyon recorded an average availability rate of 99.2%, which is currently an improvement from the prior calendar year due to less forced outage hours (or shutdowns from an unexpected failure).

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6 See Senate Bill (SB) X1-2 for 33% RPS by 2020 and Senate Bill (SB) 100 for 60% RPS by 2030 and 100% carbon-free energy by 2045. SB 100 allows the 100% clean-energy provision to be met through eligible renewable resources along with “existing large hydro and any other zero-carbon polluting resources” – which was intended to “leave the door open” to potential new technologies in the future. See focus.senate.ca.gov/sb100/faq for more information.

7 The Kraemer Power Plant was officially retired on December 31, 2019.

8 A forced outage is a shutdown condition of a power station, transmission line, or distribution line when the generating unit is unavailable to produce power due to an unexpected breakdown.
4. Continue to meet or exceed all state and federal standards for drinking water quality

Detail: APU conducts more than 44,000 analyses each year to ensure its customers receive high quality tap water that is clean, safe, and great-tasting. As a public water agency, Anaheim is required by the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (formerly regulated by the Department of Public Health) to comply with all regulations that limit the amount of certain contaminants in water. For more information about Anaheim’s drinking water quality and how it is tested, please see Anaheim’s most recent Water Quality Report: www.anaheim.net/2092/Water-Quality-Report.

Result: Goal Met. APU met 100% of drinking water standards this reporting period. Anaheim’s drinking water continues to meet or surpass all federal and state standards as established by the U.S. EPA and State Water Resources Control Board. APU continues to monitor per- and polyfluoroalkyl substances (PFAS), industrial chemicals used in the country between the 1940s to 2000s to coat carpets, clothes, furniture, food packaging, cookware and other products. While these chemicals are no longer in active use in the United States, newer and advanced technologies have detected the smallest traces of such chemicals in many of the country’s water sources, such as the Santa Ana River, which replenishes much of Orange County’s groundwater. Scientific studies have shown adverse health effects from exposure to these chemicals. Consequently, APU has taken the majority of its wells offline in compliance with state guidelines. In the near term, more water from Northern California and the Colorado River is being imported to serve Anaheim customers. Because imported water can cost twice as much as pumping local groundwater, long-term solutions are currently being planned, including capital investment in groundwater treatment solutions to safely put Anaheim’s groundwater wells back online again. For the latest information on APU’s actions to address PFAS, visit www.anaheim.net/3302/PFOS-PFOA.

5. Minimize main breaks per 100 miles of pipe to under 8 annually, which is approximately 40% below the national average

Detail: A key reliability indicator that measures the strength and reliability of water system infrastructure is the number of main breaks per 100 miles of distribution pipeline. According to the Water Research Foundation and Partnership for Safe Water, “main breaks are a primary indicator of the condition of distribution system infrastructure because they are a critical element in maintaining distribution system integrity and have a large and very visible impact on several other key operational parameters.”

Anaheim’s performance goal is calculated by dividing the annual number of main breaks by the total miles of pipe (per 100 miles) in the distribution system. To encourage greater pipeline

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9 For more information, see the EPA’s website on PFAS: www.epa.gov/pfas/basic-information-pfas#health

replacement throughout Anaheim while minimizing the number of main breaks, a goal of under 8 main breaks per hundred miles of pipe was established – a level that is approximately 40% below the national average.\textsuperscript{11}

Main breaks can occur for any number of reasons including corrosive soil, age of pipe, pipe installation methods, tree root intrusions, or even incidents where a contractor inadvertently strikes a pipe. For these reasons, the number of main breaks per month can vary significantly, which is why this metric is reported as an annualized figure. For consistency with other agencies and benchmarks, a 12-month moving total of this metric will be utilized.

**Result: Goal Met.** For the reporting period, APU recorded 4.9 main breaks per 100 miles of distribution pipeline. While main breaks can be unpredictable and occur for a variety of reasons, APU monitors the condition of pipes throughout the city and utilizes main break data to plan future main replacement projects. Last fiscal year, APU replaced over 2,200 feet of water mains to minimize the likelihood of main breaks. The chart below shows that the number of main breaks in Anaheim (per 100 miles of pipe) remains below the national average and compares favorably against neighboring agencies.\textsuperscript{12}

\textsuperscript{11} See Folkman’s study, featuring survey results from 308 participating utilities for the year 2018, making it “one of the largest surveys conducted on water main failures” that provides “an accurate representation of water main performance and operating conditions in North America.” Water Main Break Rates in the USA and Canada: A Comprehensive Study,” March 2018, Steven Folkman.

\textsuperscript{12} Results from other agencies are from FY 2019, with the exception of LADWP and Fullerton which currently have FY 2018 data available.
6. Meet the three-year maintenance goal of inspecting all 7,800 hydrants (or 217 per month) and exercising all 23,000 system valves (or 639 per month)

**Detail:** Preventative maintenance on hydrants and valves is important to managing the operability of the water distribution system, as well as minimizing customer outages when main breaks occur. Activities in this area are tracked monthly to ensure performance is on target to meet program goals. On average, 217 hydrants should be serviced monthly to meet the goal of inspecting all hydrants every three years (7,800 total hydrants divided by 36 months), while 639 valves should be exercised monthly in order to meet the goal of exercising all valves every three years (23,000 total valves divided by 36 months).

Monthly performance on such maintenance activities may fluctuate as staff may be reassigned to support higher priority activities such as time-sensitive construction, water line repairs, or planned outages. Moreover, maintenance performed in high-traffic intersections or other locations requiring additional staff for safety may also impact monthly performance.

**Result:** Goal Met. For the reporting period, APU serviced an average of 270 hydrants and 781 valves per month, meeting its performance goal. Additionally, every three years APU aims to service all 7,800 hydrants and 23,000 valves to maintain good water system performance. June 30, 2020 marked the completion of the most recent three-year maintenance cycle for hydrants and valves, and APU also met this goal. The consistent maintenance of hydrants and valves helps ensure that the water system continues to operate reliably and at optimum levels.

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**C. PRESERVE COMPETITIVENESS & FINANCIAL HEALTH**

1. Maintain annualized electric rates below other Orange County cities

**Detail:** An electric rate comparison is based on a typical single-family home that consumes 500 kilowatt hours (kWh) of energy per month. APU is the only municipally-owned utility in Orange County, while the rest of the county is served by Southern California Edison and San Diego Gas & Electric.
**Result:** Goal met. Annualized residential electric rates remain lower than rates paid by other Orange County cities. This savings increases as usage increases because investor owned utilities typically have more escalating rate tiers.

For typical residential usage of 500 kilowatt hours of energy per month, Anaheim customers pay $88.60 per month, while North Orange County cities served by Southern California Edison pay approximately 27% more, and South Orange County cities served by San Diego Gas & Electric pay approximately 63% more.

For reference, a comparison of system average rates is shown below. This rate captures the average kilowatt hour cost across all customer segments, and reflects several factors including power supply costs, customer type, number of customers, volume of sales, and efficiency of customer load. As the chart\(^{13}\) indicates, some cities have an additional utility user’s tax, which Anaheim does not.

\(^{13}\) Figures from the “Average Customer Cost Per kWh” chart were calculated or obtained from publicly available information including the California Public Utilities Commission (CPUC) and U.S. Energy Information Administration (EIA) 861 filings.
2. Maintain annualized water rates under the average of other Orange County competitors

Detail: Water rates are compared based on residential usage of 16 hundred cubic feet (HCF) per month, which is equal to nearly 12,000 gallons of water per month. This represents the total amount of water consumed by a typical residential household in Anaheim per month.

Many water districts are supported through revenue sources like property taxes or bonds paid through property taxes, which can artificially lower their water rates significantly. This is because the true cost of providing water service, which can be expensive especially in times of drought, is subsidized through water district property taxes. In contrast, Anaheim's water rates are not supported by any property taxes and only reflect the true cost of providing water service. Despite these differences, Anaheim rates remain competitive with other water agencies in Orange County.

Result: Goal met. Annualized water rates remained under the average of local Orange County competitors during the reporting period. The typical water bill for a household in Anaheim is $63.98, approximately 23% below the Orange County average as shown in the chart below. However, APU is impacted by the shutdown of its groundwater wells, and the subsequent increase in imported water costs. As a cost-of-service agency, cuts have been made including a hiring freeze, deferring vehicle replacements, foregoing travel and non-compliance training, and reductions to operating expenditures. To mitigate the costly impact of increasing imported water purchases, APU has begun planning a three-year program to build new treatment plants at the majority of its well sites throughout the city to restore many of its groundwater wells and reduce imported water costs.

![Comparison: Orange County Water Agencies](chart.png)

*Water districts receive property tax revenue which help them offset costs and subsidizes water rates. APU's water rates reflect the true cost of providing water to its customers without profit.*
3. **Remain in the A rated or higher categories for bonds**

**Detail:** Moody’s, Standard & Poor’s (S&P), and Fitch provide credit ratings “about the ability and willingness of an issuer, such as a corporation, state or city government, to meet its financial obligations in full and on time. Credit ratings can also speak to the credit quality of an individual debt issue, such as a corporate or municipal bond, and the relative likelihood that the issue may default.”

**Result:** Watch. Although both the Water and Electric Utility maintained its high credit rating with a long-term outlook rated in the A category or higher, this metric remains on *Watch* to develop strategies and tools for the Water Utility to regain its AAA rating from S&P, which was lowered on Sept. 2016 during a statewide drought that resulted in a significant reduction in water revenue. FitchRatings, however, reaffirmed the Water Utility’s AAA rating as recently as January 2020, noting the Water Utility’s “healthy” debt service coverage and liquidity, “favorable, affordable rate structure,” and “manageable capital plan.” As with many utilities, the revenue impacts of the pandemic are being closely monitored by credit rating agencies across the U.S. as APU continues to implement its financial strategies to mitigate the impacts to customers.

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<th>Rating Agency</th>
<th>Water</th>
<th>Electric</th>
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<tbody>
<tr>
<td><strong>Moody’s</strong></td>
<td><em>Not rated</em></td>
<td>Aa3</td>
</tr>
<tr>
<td><strong>Standard &amp; Poor’s</strong></td>
<td>AA+</td>
<td>AA-</td>
</tr>
<tr>
<td><strong>FitchRatings</strong></td>
<td>AAA</td>
<td>AA-</td>
</tr>
</tbody>
</table>

4. **Maintain days cash on hand of 90 Days + $50 million for the Electric Utility and 120 days for the Water Utility**

**Detail:** Days cash on hand is a liquidity ratio that indicates the number of days an organization can meet its operating expenses using the cash it currently has available. The higher the number, the more days an organization can sustain its operations without any additional cash.

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15 S&P lowered its long-term rating on the Water Utility from ‘AAA’ to ‘AA+’ in Sep. 2016 after revising its rating criteria consisting of an enterprise and financial risk framework. S&P noted that the Water Utility’s practices were “supportive of high credit quality” and that its credit rating could be raised if “financial metrics improve such that the financial risk profile is commensurate with peers at a higher rating level.” To view the S&P ratings report, click here: [www.anaheim.net/DocumentCenter/View/10032](http://www.anaheim.net/DocumentCenter/View/10032).

inflows. The ratio is calculated in this report by dividing the unrestricted cash balance by the total projected cash expenses for the entire fiscal year and multiplying this quotient by 365 days. For the Electric Utility, the $50 million balance – to meet specified financial performance goals and debt service coverage requirements – is converted into days using this formula and added on to the 90 days target. Currently, the target for the Electric Utility is roughly 140 days.

**Result: Goal Met.** As of June 30, 2020, the Electric Utility had 193 days of cash on hand, while the Water Utility had 320 days of cash on hand.\(^\text{17}\) The charts below demonstrate that utilities can maintain a high credit rating without holding excessive amounts of cash on hand.\(^\text{18}\)

Water’s days cash on hand is projected to remain at current levels through Fiscal Year 2020/21 because the majority of Water Utility capital projects are funded through existing bond funds. APU’s strategic financial plan focuses on cash-funding more routine, capital improvement projects as a way to minimize bond issuances, lower future debt service costs, and to provide greater financial flexibility.

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\(^{17}\) The Electric and Water Utility’s days cash are unaudited estimates as of June 30, 2020.

\(^{18}\) For consistency, credit ratings are taken from S&P Ratings only; the rating reflects S&P’s long term rating for that agency’s senior-lien revenue bonds. Days cash was calculated based on financial figures listed in each respective agency’s Comprehensive Annual Finance Report (CAFR) for the fiscal year ending June 30, 2019. S&P’s highest rating is AAA, followed by AA+, AA, and AA-. The modifiers “+” or “-” indicates the relative status of that rating within the rating category. For more details, see S&P Ratings.
5. Maintain a debt service coverage ratio of 1.6 or higher for the Electric Utility, and 2.0 or higher for the Water Utility

**Detail:** Debt service coverage ratio (DSCR) is a financial metric that assesses an organization’s ability to pay its debt. The metric in this report is calculated by dividing a fiscal year’s total available net revenue to meet debt obligations by total direct debt service in that same period.19 The goal for this metric was established in accordance with Governmental Accounting Standards Board (GASB) rules. Please note that financial figures in this report are unaudited, and may change after the year-end audit when all adjustments have been made and are finalized.

**Result:** Watch. As of June 30, 2020, the Electric and Water Utility’s debt service coverage ratios are projected at 1.7 and 1.8, respectively. The COVID-19 pandemic and the associated stay-at-home orders forced many businesses to close or scale back operations. As a result, energy and water sales declined during the last few months of the fiscal year. And as mentioned earlier, the presence of PFAS substances in the groundwater basin necessitated a shift towards importing costlier water, contributing to a decrease in the Water Utility’s DSCR – which is expected to decline further in fiscal year 2020/21. Over time, as groundwater treatment solutions are implemented and the volume of imported water declines, Water Utility’s DSCR is expected to climb back to 2.0 coverage.

D. **MANAGE ENTERPRISE RISK EFFECTIVELY**

1. Proactively identify and manage enterprise-wide risks so that all key risks are properly addressed or mitigated, and no material violations occur that would adversely affect APU’s operations or its assets

**Detail:** APU manages its enterprise-wide risks on an ongoing basis and prepares an internal compliance plan to monitor and report on its compliance with applicable laws and regulations. Enterprise-wide risks also include keeping counterparty default risk – or the risk that the other party in a transaction will be unable to fulfill its obligations – under a half percentage of short-term power supply costs. APU minimizes such counterparty default risk through analyzing and monitoring the credit risk of counterparties, and through employing a default risk model against APU’s short term power supply costs.

**Result:** Goal Met. During the reporting period, no material violations or compliance issues arose, and counterparty default risk was kept at 0%.

E. **INVEST IN A POSITIVE AND PRODUCTIVE WORK ENVIRONMENT**

1. Maintain an industrial safety and health injury rate that does not exceed 1.0

**Detail:** Many organizations measure the effectiveness of their safety program and culture through an industrial safety metric known as the Disabling Injury Rate (DIR), or the number

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19 Total available cash to meet debt obligations is before any general fund transfers.
of injury cases involving days away from work for every 100 employees. According to some safety experts, this rate “does a better job of representing the actual rate of workplace injury,” because it actually shows the incidence of serious injuries.

This safety metric conforms to the standard base rate calculation used by the Occupational Safety and Health Administration (OSHA): a base of 100 employees, working 40 hours a week, and 50 weeks per year is applied (for a total of 200,000 labor hours). To calculate the DIR, multiply the number of injury incidents resulting in days away from work by 200,000, and divide this product by the number of total employee hours worked.

**Result:** Goal Met. For the reporting period, APU recorded a DIR of 0.29; for fiscal year 2019-20, the DIR is 0.27. APU promotes a culture of safety and awareness through convening regular safety meetings and requiring employees to undergo safety trainings specific to their positions, such as electric linemen who complete safety training related to arc flashes and confined spaces. These efforts help create awareness of potential safety issues and provide employees with resources to mitigate workplace risk factors.

2. **Meet or exceed industry benchmark for employee efficiency**

**Detail:** A widely-used measure of employee efficiency in the electric utility industry is the number of retail customers per non-power generation employee. This is a ratio that divides the average number of retail customers by the number of full-time and part-time employees that are not involved in the generation of power. To calculate this ratio, the average number of electric meters in the reporting period is used as a proxy for the number of electric retail customers. Additionally, to maintain accuracy when comparing this metric against industry benchmarks, APU prorates employees that are shared with the Water Utility. For benchmarking against other electric utilities nationally, APU uses the American Public Power Association (APPA) “Selected Financial and Operating Ratios of Public Power Utilities.”

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21 For a six-month period, the DIR is calculated by multiplying the number of injuries resulting in days away from work by 100,000 (half of the 200,000 annual labor hours), and dividing this product by the number of total employees hours worked. See the Bureau of Labor Statistics’ website on “How To Compute a Firm's Incidence Rate for Safety Management”: http://www.bls.gov/iif/oshceval.htm

22 See “APPA Financial and Operating Ratios of Public Power Utilities, 2018,” American Public Power Association. Anaheim’s Electric Utility had 442 retail customer per non-power generation employee compared to the APPA median benchmark of 315 retail customers per non-power generation employee.

23 Ibid.
For the Water Utility, APU uses the same methodology as above, dividing the number of water customers by the number of full-time and part-time water employees. The number of water meters is used as a proxy for the number of water customers. Employees that are shared with the Electric Utility, such as customer service or billing staff, are prorated as part of this calculation. APU uses the American Water Works Association (AWWA) benchmark to compare itself against other water utilities nationally.24

**Result: Goal Met.** The Electric Utility had nearly 40% more retail customers per non-power generation employee than the median benchmark reported by the American Public Power Association for public power utilities with 100,000+ customers. The Water Utility had over 25% more water customers for every water employee than the median benchmark reported by the American Water Works Association.

The charts below demonstrate how both the Electric and Water Utility’s employee efficiency metric compares favorably against other peers.25

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**F. MAINTAIN ALIGNMENT WITH CITY GOALS**

1. **Support City Council policies and initiatives, as well as the City Manager's direction**

   **Detail:** This section will describe how APU supports City Council and City Manager policies and initiatives. Although definitive targets are not always available for these broad, city-wide initiatives, APU will provide specific examples of programs and efforts that are in-line with the City’s vision and goals.

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24 AWWA published their 2017 benchmarking in 2018. See “2018 AWWA Utility Benchmarking Performance Management for Water and Wastewater.” Anaheim’s Water Utility had 615 water customers for every water employee compared to the AWWA median benchmark of 486 water customers per employee.

25 Each agencies’ employee count was compiled from FY 2019 budget information found on their website. Because peer agencies do not specify how many generation employees they have, Anaheim includes all of its Electric Utility employees in this comparison chart for a fair apples-to-apples comparison.
Result: Goal Met. During the reporting period, the City declared a local emergency due to COVID-19, with City Departments responding to local challenges and focusing on providing assistance and service to the community in a safe fashion. The next section describes some of APU’s activities to help customers and their communities during this pandemic.

COVID-19 Customer Assistance

- **New Appointment System:** APU prioritized the development of an appointment system so that customers can now make an in-person appointment with Customer Service, Electrical Engineering, Water Engineering, and Community and Sustainability Programs through the APU website. The new appointment system facilitates planned customer visits in a convenient fashion to reduce safety risks.

- **Activity Care Packages:** APU sent over 100 activity kits to residents impacted by school closures that took effect in March. The kits contained a model utility truck, a utility coloring book with crayons, and a Dr. Seuss inspired activity book about sustainability, offering a fun and educational way for families to interact with their children.

- **Energy Efficiency Kit:** APU provided LED lighting kits to frontline workers as a way to honor and show support to them. Each kit included a thank you note featuring student-created art, a three-way LED bulb, a motion sensor LED bulb, a dusk to dawn security LED bulb, and a dusk to dawn night light. To date, over 200 kits have been distributed to frontline workers in the community.

- **Customer Assistance:** APU implemented several strategies to help customers impacted by the pandemic. This includes temporarily suspending utility service shut offs, offering extensions and payment plans, and providing emergency bill payment relief to customers experiencing financial hardship. Through federal and local emergency payment relief programs, eligible customers can receive financial assistance for their electric and water utility bills. APU is also participating in the City’s Economic Development outreach efforts and is offering small business customers utility payment assistance and efficiency improvements. The chart on the right provides a summary of the customer assistance provided since March.
Student Engagement

The following student events and programs held during the reporting period focused on encouraging sustainability and helping students grow professionally as they pursue their educational and career endeavors.

- **Sustainable Schools Award:** In January, members of the Public Utilities Board awarded two schools that exemplified environmental stewardship as the inaugural recipients of the Sustainability Schools Award Program. The first was Baden-Powell Elementary, selected for installing 630 LED light fixtures, 59 plug load power management devices, 31 high efficiency network controller HVAC units, and 8 high efficiency transformers; offering a STEM component for teachers and students; hosting a science event for junior high school students; and generating thousands of dollars in electrical savings. Katella High School was also selected for establishing a water reclamation site; installing LED light fixtures; constructing an agricultural area featuring two greenhouses; creating an aquaponics garden; implementing a sustainability curriculum; and generating thousands of dollars in electrical savings. Both schools received 30 Energy Star® laptops and charging stations for their efforts in incorporating sustainability practices and initiatives.

- **Canyon High School EV Presentation:** In February, APU piloted the first electric vehicle (EV) school presentation geared towards high school students to encourage EV adoption. The students of Canyon High School learned about green transportation and EVs, and analyzed the environmental effects of different methods of transportation. During the visit, students also weighed the costs and benefits of various hybrid and electric vehicles, explored EV related careers, and had the opportunity to examine EVs up close. APU is planning additional EV demonstration events to help encourage EV adoption and reduce greenhouse gas emissions following safety protocols.
- **Career Path Symposium:** APU hosted 60 students from Loara High School for its annual career paths symposium prior to the onset of the coronavirus pandemic. The students divided into four groups to attend six break-out sessions featuring different careers throughout the utility industry. Students also received coaching on job interview etiquette and had the opportunity to discuss their overall experience at the end of the day. This event serves as an opportunity for students to explore the different careers involved in operating a utility and allows APU to mentor students as they approach college and begin working toward their long-term career goals.

- **Solar Car Kits:** In May, APU organized a contactless student engagement opportunity to educate students on solar power and home energy efficiency. APU distributed a survey designed for students to review their home energy usage, recognizing that many families are currently spending more time at home due to the pandemic. The survey also included educational information on best practices to maximize efficiency and a 216-piece solar car kit that students could build on their own. Over 150 solar car kits were distributed, offering students the ability to learn about solar power, a natural resource that can be used to power their homes.

Customer Service Initiatives
Since 2012, APU has systematically modified 42 of the 51 rules in its Rates, Rules, and Regulations with the goal of simplifying them, reducing customer costs, and providing more flexibility for customers. During the reporting period, APU modified a rule to establish a 10% water bill discount for income-qualified senior, long-term disabled, and military veteran residential water customers, similar to the 10% electric bill discount that is currently available. The infographics below show how customers have benefited from such rule modifications during the reporting period.
**COURTESY NOTIFICATION PROGRAM**
APU provides a personalized phone call or email to alert customers when their bill is past due to prevent unwanted disconnection of service. Courtesy notifications were paused from March to April 2020 due to APU’s suspension of service disconnections as part of their COVID-19 response.
*Effective since Feb. 2016*

**REDUCED CUSTOMER SERVICE FEES**
Reconnection fees were reduced from $30 or $40 to a flat $20 fee, while the same day service establishment fee was reduced from $40 to $35.
*Effective since May 2017*

**EXTENSIONS AND PAYMENT PLANS**
Customers requiring assistance with payment of service may request an extension or payment plan. On average, approximately 34,300 extensions and 740 payment plans are granted annually.
*Effective since Feb. 2016*

**INCOME QUALIFIED DISCOUNTS**
Income qualified seniors, veterans, and long-term disabled customers can receive a 10% discount on the electric and water portion of their utility bill. Of the total active customers receiving these discounts, 72% are seniors, 24% are long-term disabled customers, and 3% are veterans.
*Effective since Sep. 2015*
WAIVED DEPOSIT FEE

A temporary water meter is typically requested by contractors requiring water service for their projects. Deposit fees of $270 for 2” and smaller meters and $700 for 2.5” meters were removed to reduce upfront costs for new customers. Effective since Feb. 2015

$20,170+
customer savings from waived deposit fees

ENCOURAGING BUSINESS DEVELOPMENT & GROWTH

Staff has recommended and City Council has approved several rule modifications since September 2013 intended to encourage greater development and growth within Anaheim. Such rule changes allow for new electric and water service connections and upgrades through streamlined plan checks, more flexible options and rates, and reduced service establishment fees and deposits. The graphs below depict the growth in new service connections and upgrades over the last five years.