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STATE OF CALIFORNIA
BEFORE THE CALIFORNIA ENERGY COMMISSION

In the Matter of: Developing Regulations, Guidelines and Policies for Implementing SB 350 and AB 802	Docket No. 16-TRAN-01 Anaheim Public Utilities Department's Response to CEC Request for Information Regarding Transportation Electrification Objectives October 4, 2016

Anaheim Public Utilities Department's Response to CEC Request for Information Regarding Transportation Electrification Objectives

Thank you for the opportunity to provide responses to several questions included in an email from Energy Commission staff dated September 19, 2016 seeking initial information about utility planning, capabilities and challenges, as well as recommendations, regarding state government actions to implement the SB 350 transportation electrification objectives. Anaheim Public Utilities Department (APU) views transportation electrification an important part of its commitment to reducing greenhouse gas (GHG) emissions while supporting its many other sustainability initiatives. Responses to the Commission's questions are below.

1. **How would you characterize your approach and current and proposed activities to include transportation electrification elements in integrated resource plans?**

   Last July, Anaheim's City Council adopted the Public Utilities Department's Greenhouse Gas Reduction Plan. This plan includes sustainable initiatives for both the water and electric utilities. Such initiatives include switching to renewable power generation technologies, enhanced energy efficiency programs, rooftop solar energy production, conserving water to reduce pumping loads and vehicle electrification. Most, if not all, of the GHG reduction measures outlined in this plan will be incorporated into APU's integrated resource plan that is currently under development.

Additionally, APU's City Council recently adopted an enhanced Public Access Electric Vehicle (EV) Program that includes increasing APU's existing EV rebate amounts to encourage installation of public chargers. As part of this program, the utility has opted into the California Air Resources Board's Low Carbon Fuel Standard (LCFS) Program, and will use the proceeds from the sale of LCFS credits towards the installation of additional public access charging stations throughout the city.

Do you expect to establish electric transportation targets or goals?

Each of the sustainable initiatives in APU's GHG Reduction Plan described above, including transportation electrification, includes planning targets out to the year 2030. Currently, the City of Anaheim has approximately 900 low or zero emission vehicles throughout the City, and with APU's efforts to support vehicle electrification, this number is expected to grow to approximately 5,000 by the year 2030.

2. **What are your current capabilities to address in IRPs transportation electrification procurement?**

Anaheim Public Utilities will be addressing its transportation electrification efforts in its integrated resource plan currently under development.

What do you see as challenges?

Anaheim Public Utilities see the costs of electric vehicles and existing vehicle turnover as primary challenges, as these will be based solely on consumer choice, which the utility has only minimal direct control. As APU provides more opportunity for residents, businesses, and visitors to the City to charge EVs within the APU service area, the use of EVs is expected to increase. As a predominantly built-out city, another key challenge includes adding charging infrastructure to existing rental and multiple-family residential housing which is dependent on the property owners' choice to install the infrastructure. The Utilities coordinates closely with the City of Anaheim's Planning and Community and Economic Development Departments in their efforts to streamline permitting and installation of new facilities.

3. **What are your estimates of the existing baseline and projected growth of electric transportation and estimates of greenhouse gas emission reductions by 2020, 2030 and 2050? What analytical method do you use to make these calculations? What data do you expect to gather to evaluate progress, how do you plan to gather it, and can you share the data with the Energy Commission?**

As mentioned above in question #1, APU's Greenhouse Gas Reduction Plan includes planning targets for transportation electrification out to the year 2030. This is a policy document specific to APU and has not been incorporated into the City's current General Plan.

When developing the overall plan, APU completed an internal evaluation of the GHG reductions expected from our policies based on available information, primarily in the area of GHG emissions resulting from generation of electricity provided to our customers.

Emission reductions resulting from transportation electrification were derived by determining the number of electric vehicles registered within the city in 2015, then applying an estimated growth in the number of electric vehicles out to the year 2030. Using CARB's determinants from the LCFS regulations, cumulative GHG reductions for each year (2015-2030) were calculated by determining the difference between the carbon intensity of fuel for a conventional gasoline-powered vehicle versus an electric vehicle, multiplied by the estimated number of electric vehicles per year.

Utilities participating in CARB's LCFS program are required to gather and report data to demonstrate compliance with the LCFS program; such as, utility owned charging stations, total kilowatt hours, average or peak charging times, etc. To the extent this data is available and can be shared with the Commission, APU is willing to do so.

4. **What have you achieved in electric transportation to date and what do you anticipate for future deployment regarding:**

- **Utility fleet vehicles and workplace charging for your employees;**

  The Department has a total of 263 vehicles, of which 172 are light–duty vehicles and 91 are medium–or heavy–duty vehicles. The heavy duty vehicles are being converted to use biodiesel fuel. The Department currently has 4 low or zero emission vehicles that include hybrids or electric vehicles, and will continue to convert its fleet to meet South Coast Air Quality Management District (SCAQMD) and Department of Energy (DOE) requirements for fleets. Over the last few years the utility installed approximately 26 electric vehicle chargers on City owned property, which are available free of charge to the public as well as employees. An additional 13 electric vehicle chargers have been installed for City employee or City fleet only use.

- **Procurement funding and funding mechanisms for service area electric vehicle charging deployment in market subsectors (residence, workplace, multi-unit dwellings, public destinations and corridors) and the number and types of installations, amounts of funding and project locations;**

  For the past several years, APU has offered EV Charger rebates to customers who install a Level 2 (240-Volt) plug-in electric vehicle charger. Through this program, APU reimburses customers for out-of-pocket expenses up to $500 per charger. Eligible expenses include the charger purchase price and installation costs. In addition to the $500 rebate, city's permit application fees for the EV

charger are waived. Between November 2012 and July 2016, APU provided $213,000 to permit 297 electric vehicle chargers.

Public access chargers installed by APU were partly funded through grants received from the South Coast Air Quality Management District or the California Energy Commission (~$17,000 grant). To encourage additional EV charger installations at multi-family dwellings, restaurants and other retail establishments under the recently adopted Public Access EV Charger Program, APU will allocate up to $5,000 per charger towards the installation of up to four charging stations per customer.

In addition, APU will provide K-12 schools and multi-family locations that qualify as affordable housing projects, as defined by the State of California Health and Safety Code, with up to $10,000 per charger, to install up to four charging stations per location.

Through participation in CARB's LCFS Program, APU will use any proceeds received from the sale of LCFS credits to fund additional public charging stations throughout the city to support residents, businesses, and visitors to the City that have opted to use an EV.

- **Reliability of charging stations in your service area;**

  APU EV charging installations account for about 30% of the approximate 100 public charging stations located within Anaheim. To date, APU's owned and maintained installations have experienced high levels of reliability.

- **Anticipated need for electric distribution system upgrades and cost;**

  APU is committed to providing reliable electric service to its customers. Reliable electricity is delivered to Anaheim customers by combining a diverse portfolio of power resources with a modern and well maintained distribution network. APU is ranked in the top 25 percent (quartile) of utilities nationwide when it comes to electric system reliability, which means that APU customers have fewer and shorter power outages than the other 75 percent of utilities nationwide. The effect of increased load on APU's system as a result of transportation electrification in the near-term is expected to be manageable.

- **Tariffs;**

  APU offers a Domestic Electric Vehicles (D-EV) rate schedule for single family homes, as well as a Developmental Domestic Time-of-Use (DEV-D-TOU) and two commercial time of use rates schedules (TOU and Dev-D-TOU-L) to encourage off peak charging.

- **General public and business education and outreach, and plans to engage disadvantaged communities; and**

  Please refer to APU's response to question #5 below. In addition, APU is coordinating with the City's Community and Economic Development Department on outreach efforts to affordable housing and multi-unit dwellings with respect to APU's Public Access Electric Vehicle EV Program, and finding ways to encourage existing building owners and project developers to take advantage of this new program.

- **Other activities.**

5. **How would you characterize your interaction with private companies providing electric vehicle charging equipment, installation, operation and services? How do you expect relationships and business models to evolve and change?**

   The City of Anaheim's Planning and Building Department, in coordination with APU, has developed a streamlined permitting process for EV charging infrastructure. The City continues to have positive relationships with private companies that provide EV charging equipment, as well as with our business community that encourages the installation of charging equipment. APU provides public outreach and education on the benefits of EV use to its residents and businesses. The City and APU's websites provide information, frequently asked questions, permit process descriptions, and more on EV charging infrastructure and EVs in general.

   As referenced above, the APU provides rebates that offset some, if not all, of the permit fees for EV chargers. Additionally, to help streamline the permitting process and accessibility, the City's Planning and Building Department has included both residential and commercial EV charger permits in its recently launched online permitting program. Applications for the installation of charging equipment can now be made online at a time convenient to customers. For customers that prefer in-person customer service, EV charging equipment approvals are performed over-the-counter to the extent possible.

   Over time, the City and APU will continue to work together to address the emerging needs of our business community, as well as business models for private companies.

6. **To what extent have you taken advantage of state government incentives (ARFVTP grants, Clean Vehicle Rebates, and Low Carbon Fuel Standard credits)? In what market subsectors do you see a need to for continuation of these incentives to complement POU electric transportation activities? Do you have any recommendations to improve implementation of government incentives?**

Please also see responses to questions #1 and #4 above. APU has received grant money to invest in transportation electrification infrastructure, and will continue to pursue grant opportunities as they become available to assist in meeting internal APU and statewide climate goals.

Regarding recommendations to improve implementation of government incentives; the process for grant applications and subsequent post-award reporting can be lengthy and time consuming. To the extent the grant application processes can be fast tracked or streamlined, such efforts would be beneficial. Second, a potential opportunity for expansion of electric vehicle ownership would be to offer incentives to those wishing to purchase a pre-owned electric vehicle.

7. To what extent do you anticipate transportation electrification growth to impact strategies for SB 350 requirements, such as achieving the 50 percent renewable portfolio standard and doubling of additional achievable energy efficiency savings by 2030?

At this point in time, APU is taking transportation electrification growth into consideration when developing its strategies for meeting the statewide goals for the renewable portfolio standard and the doubling of energy efficiency savings. Current levels of electrification have not resulted in a measurable challenge to the utility meeting these state goals. As technologies advance, statutes, and consumer choices change over time, APU's strategies to address meeting both APU and statewide goals while ensuring compliance will be considered and implemented in future updates to the APU's integrated resource plan.

8. Where do you need assistance to achieve the SB 350 requirements related to transportation electrification?

APU is confident that it is already on its way to meeting the SB 350 requirements related to transportation electrification. However, the CEC's swift release of guidance for POU development of integrated resource plans is necessary for POU compliance with SB 350. The APU would find it helpful in the guidance for the CEC to include:

- Standard load curves for EV charging at various charging locations and venues – for example charging at residential, commercial, or employment locations to be forecast.
- Current forecasts for EV market penetration (e.g. the number of EVs expected) both in terms of residential as well as employment or general travel. These forecasts should reflect the expected, high and low market penetration.

- Provision of data from other state agencies (e.g. the Department of Motor Vehicle's automobile registrations for EVs) that affect specific POUs efforts to develop forecasts and programs for electrification.

Finally, IRP guidelines should recognize POU efforts to comply with any new requirements, within the parameters of maintaining affordable rates while ensuring adequate, prudent and operationally-viable power supply, as well as maintaining transmission and distribution system reliability.

We would like to thank the Commission for its on-going efforts to seek POU input regarding the development of integrated resource plans as required by the passage of SB 350. APU welcomes continued collaboration with the Commission as this process moves forward.

Respectfully Submitted,

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