BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Liberty Utilities (CalPeco Electric) LLC (U 933 E) for Approval of Electric Vehicle Charging at Schools, State Parks, and Beaches (AB 1082 & 1083).

Application 18-07-____
(Filed July 30, 2018)

TESTIMONY OF JOHN FRIEDRICH IN SUPPORT OF LIBERTY UTILITIES (CALPECO ELECTRIC) LLC’S APPLICATION FOR APPROVAL OF ELECTRIC VEHICLE CHARGING AT SCHOOLS, STATE PARKS, AND BEACHES (AB 1082 & 1083)

Dated: July 30, 2018
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I. INTRODUCTION

The State of California has set ambitious climate change goals aimed at improving air quality and reducing greenhouse gas (“GHG”) emissions. For example, under Senate Bills (“SB”) 350 and 32, the State of California has set the goal to increase California’s renewable electricity procurement from 33% by 2020 to 50% by 2030 while reducing GHG emissions 40% below 1990 levels by 2030. Given that the transportation sector accounts for over 40% of California’s GHG emissions, increasing Transportation Electrification (“TE”) programs to power this sector with clean electric power will be critical to the state’s ability to achieve its climate change goals.

Liberty Utilities (CalPeco Electric) LLC (“Liberty CalPeco”) seeks to aid California in reaching these and other goals and proposes AB 1082 and 1083 Pilots (“Pilots”) designed to significantly accelerate TE in its service territory and region.¹

AB 1082 and AB 1083 authorize Liberty CalPeco and the other California investor-owned utilities to file applications requesting CPUC approval of pilots to support the installation of electric vehicle (“EV”) charging stations at schools and other educational facilities (AB 1082) and state parks and beaches (AB 1083). Liberty CalPeco’s Pilots will deploy electric infrastructure to

¹/ “Transportation Electrification” is defined as “the use of electricity from external sources of electrical power, including the electrical grid, for all or part of vehicles, vessels, trains, boats, or other equipment that are mobile sources of air pollution and greenhouse gases and the related programs and charging and propulsion infrastructure investments to enable and encourage this use of electricity.” Cal. Pub. Util. Code § 237.5.
support EV charging at schools, state parks, and beaches throughout its service area. The new EV charging stations at schools, state parks, and beaches will help put California on a path to achieving its GHG goals.

II. LIBERTY CALPECO’S PROPOSED AB 1082 AND 1083 PILOTS

Liberty CalPeco’s proposed AB 1082 and 1083 Pilots support the installation of EV charging stations at school facilities and other educational facilities (AB 1082) and state parks and beaches (AB 1083) throughout Liberty CalPeco’s service territory. The AB 1082 and 1083 Pilots propose to deploy 56 Level 2 charging ports and two DC Fast Chargers (“DCFC”) located at 17 school facilities and 10 Level 2 charging ports at three state park and beach sites. In support of the Pilots, Liberty CalPeco has also developed an outreach plan to provide information about the pilots to its customers.

A. AB 1082 Pilot

Liberty CalPeco proposes a two-year Pilot to address AB 1082. The schools in Liberty CalPeco’s service territory have identified a need for charging stations for fleet vehicles, parents, teachers, and students, as well as for charging electric school buses. Liberty CalPeco proposes a program in which Liberty CalPeco owns, operates, and maintains the charging stations.

Liberty CalPeco has identified 17 sites for EV charging station locations: 15 K-12 school sites, the Lake Tahoe Community College (“LTCC”), and a bus barn operated by the Lake Tahoe Unified School District (“LTUSD”). Liberty CalPeco will install one dual pedestal Level 2 charging station, with two charging ports, at 13 K-12 school sites and two dual pedestal Level 2 chargers, each with two charging ports, at two K-12 school sites. Given the climate in the Lake Tahoe region, Liberty CalPeco’s forecast includes installing safety bollards, snow melt, and lighting equipment where appropriate.
At the LTCC site, Liberty CalPeco will install two dual pedestal Level 2 charging stations, each with two charging ports, and two DCFCs. LTCC is currently developing a mobility hub where the chargers will be installed. Similar to those at the K-12 schools, the charging stations proposed for LTCC are intended to support parents, students, fleet vehicles, staff, and buses, and will also include installation of safety bollards, snow melt, and lighting equipment where appropriate. LTCC supports Liberty CalPeco’s proposed installation of charging stations on LTCC’s campus. In a letter to the CPUC, attached hereto as Attachment A, LTCC states, “We highly encourage the approval of the Liberty Utilities’ pilot program in order to make this vision a reality.”

At the LTUSD bus barn, Liberty CalPeco will install eight dual wall-mounted Level 2 charging stations with a total of 16 charging ports. These charging stations are intended to support new electric school buses. LTUSD’s goal is to replace 50% of its current diesel school bus fleet with electric school buses in the next three years and is actively seeking funding to make this goal a reality. In total, Liberty CalPeco’s AB 1082 Pilot will install 28 dual pedestal charging stations, 56 charging ports, and two DCFCs.

The capital costs for AB 1082 are estimated at $3.861 million. The forecast includes the charging equipment hardware and software, transformers, permitting, project management, marketing, provisions for the Division of State Architecture, electrical work, trenching, and contingency. Liberty CalPeco intends to develop an RFP for procurement of the charging station hardware and software, and for the required electrical and construction work.

B. AB 1083 Pilot

Liberty CalPeco proposes a two-year pilot program to address AB 1083. Liberty CalPeco has worked closely with California State Parks to determine the most attractive sites for EV charging stations in Liberty CalPeco’s service territory. Three locations have been identified: Lake
Tahoe Golf Course, Sugar Pine State Park, and Kings Beach State Park. All three locations will serve visitors to these sites and one location, Sugar Pine State Park, will serve the surrounding community, employees, and fleet vehicles.

Liberty CalPeco will install five dual pedestal charging stations, each with two charging ports, at the three CA Park locations.

The capital costs for AB 1083 are estimated at $0.741 million. The forecast includes the charging equipment hardware and software, transformers, permitting, project management, marketing, provisions for the Division of State Architecture, electrical work, trenching, and contingency. Liberty CalPeco intends to develop an RFP for procurement of the charging station hardware and software and for the required electrical and construction work.

C. **Pilot Outreach Program**

Liberty CalPeco plans to provide information on the new EV charging equipment—as well as EV facts, utility rates, incentives available, and program information—through its bill inserts, monthly newsletters, website, social media platforms, public presentations, school curriculum and flyers, and at community events.

The outreach plan includes the following proposed elements:

- Two 30-second videos to be used on Liberty CalPeco’s website and a television commercial.
- Paid media placement for television, radio, print, and online to promote program.
- Coordination with pilot program partners to advertise availability of charging stations. Available platforms include regular school district email newsletters and websites, in addition to the Tahoe Regional Planning Agency’s EV Readiness Plan website: [http://tahoealternativefuels.com/](http://tahoealternativefuels.com/)

The forecast cost of the Pilot Outreach Program totals $85,000. These costs include development of the initial products used in the campaign, including print, radio, TV, and online
resources. The costs also include development of a marketing and communications plan, implementation and management of the program, and ongoing coordination.

III. LIBERTY CALPECO’S PILOTS MEET THE REQUIREMENTS OF AB 1082, AB 1083, AND THE ASSIGNED COMMISSIONER’S RULING

As demonstrated below, Liberty CalPeco’s TE program conforms to the guidelines established in Commissioner Peterman’s January 24, 2018 Assigned Commissioner’s Ruling (“ACR”) and meets the requirements of AB 1082 and 1083.

A. The Pilots Align With The Region’s TE Plans and Liberty CalPeco’s Other Proposed TE Projects

Liberty CalPeco proposes Pilots to meet the growing demand of residents and visitors to the Lake Tahoe region, as well as the needs and interests of schools in the area. The Pilots align with the Tahoe-Truckee Plug-In Electric Vehicle Readiness Plan developed by the Tahoe Regional Planning Agency (“TRPA Plan”), in consultation with Liberty CalPeco and other partners, which includes this vision:

Establish Tahoe-Truckee as a leader in mass PEV deployment supported by robust PEV education and engagement; a convenient network of charging infrastructure; streamlined charger installation; standardization of codes; and widespread use of renewable energy resources.

The TRPA Plan’s primary goal is to “maximize the share of electric miles traveled in the Tahoe-Truckee Region to achieve sustainability and environmental improvement objectives, especially reducing greenhouse gas emissions, and criteria air pollutant emissions.”

The TRPA Plan notes that “because the region is a destination for so many non-residents—including visitors and second home owners—the role of publicly available charging is more important than in other regions.” Therefore, a key metric identified for this goal is “charging stations deployed at select destinations in the Tahoe Region, for instance at popular sites such as
in or near town and regional centers, retail centers, beaches, recreational areas, educational facilities, and large marinas.”

The Pilots will help meet the transportation electrification objectives of the Tahoe Region, particularly boosting charging infrastructure at priority recreational areas and educational facilities, as identified in the TRPA Plan and specified in AB 1082 and AB 1083. The AB 1082 and 1083 Pilots will compliment Liberty Utility’s first TE Pilot Plan, which will deploy fast charging stations in key transportation corridors within its service territory.

Despite strong interest, there is currently no charging infrastructure at Tahoe parks, beaches, and schools. These Pilots will help address the strong interest in EV charging at these locations, as well as to support the initiative of schools throughout service territory to add electric buses to their fleets. Many schools are actively exploring funding opportunities available to electrify their school bus fleets, including the VW Settlement Fund being administered by the California Air Resources Board (“CARB”), which proposes to allocate $130 million to California schools to purchase electric buses. The LTUSD has a goal of replacing 50% of its current diesel school bus fleet with electric school buses within the next three years. However, there are fewer funding opportunities available for EV charging infrastructure, a gap in conversion to electric school buses that this pilot proposal helps address.

The proposed deployment of 56 Level 2 electric vehicle charging ports and two DC fast chargers will help reduce GHG emissions generated by Tahoe residents, as well as visitors to the region. Deployment of charging infrastructure at every school in Liberty CalPeco’s service territory, including for electrification of school bus fleets, will reduce the amount of toxic vehicle exhaust to which schoolchildren are exposed. In addition, this pilot program will help achieve a goal in the TRPA Readiness plan to “improve water quality by reducing atmospheric nitrogen
deposition and gasoline flowing into the watershed, as well as reducing noise impacts from roadways.”

**B. The Charging Equipment Will Be Used and Useful**

Each of the proposed charging station locations for this pilot project is based upon an evaluation of current demand. Liberty CalPeco has proposed a modest and minimal number of charging stations for each site in the pilot project in order to validate demand for the charging infrastructure and to account for anticipated improvements in charging technology.

The school locations will have the option to make their chargers available to the public throughout the year, which Liberty CalPeco anticipates will be more likely in the summer months when school is not in session. Of the three proposed state park locations, two are at sites at or near year-round businesses, which will sustain demand.

Given the expected growing demand for electric vehicle charging, Liberty CalPeco does not anticipate a request by school facilities to remove charging stations, although some may choose to upgrade to newer, higher capacity stations as technology advances.

**C. The Pilots Will Benefit Disadvantaged Communities**

While Liberty CalPeco’s service territory does not have any disadvantaged communities, as defined by the California Environmental Protection Agency’s CalEnviroScreen, in the LTUSD, over 60% of students qualify for the free and reduced cost lunch program. According to federal guidelines, a family of four can earn up to $43,568 (185% of poverty level) to receive reduced priced lunches and up to $30,615 (130% of poverty level) to receive free lunches.

Liberty CalPeco’s AB 1082 Pilot will install charging stations at every school in its service territory. This Pilot will be of particular importance to rural, lower-income school districts that likely do not have the resources to install charging stations or implement school bus electrification without this Pilot. The presence of charging stations at each school will also make
the technology visible and accessible to all students’ families, including the substantial percentage of families that are low-income. Further, the transition from polluting diesel school buses to electric buses will have health benefits for all students who ride the bus to and from school.

D. The Pilots Will Gather Data For Reporting and Evaluation Purposes

Liberty CalPeco anticipates that any data required for reporting and evaluating purposes will be available to Liberty CalPeco through the EV charging station vendors. Typical information that is gathered includes energy and vehicle usage data that can be customized for each individual utility’s use.

E. The Pilots Will Compete Fairly With the Private Market

Liberty CalPeco’s pilot will use a competitive RFP process to select the vehicle chargers, as well as for electrical and grading work.

F. The Pilots Will Leverage Partnerships

Liberty CalPeco has developed this pilot proposal in close consultation with the Tahoe Regional Planning Agency, California State Parks, the Lake Tahoe Unified School District, the Tahoe Truckee Unified School District, the Sierra-Plumas Joint Unified School District, Alpine County Unified School District, Eastern Sierra Unified School District, Lake Tahoe Community College, Tahoe Transportation District, and various community partners. Liberty CalPeco will continue to work closely with these partners to deploy the stations and develop a marketing and outreach campaign for their utilization.

The Lake Tahoe Unified School District, Eastern Sierra Unified School District and Tahoe Transportation District have been pursuing funding for electric school and city buses, and other school districts have been researching funding opportunities as well. Liberty CalPeco is advising rural school districts of the availability of EV funding options.
G. **The Pilots Will Be Built With Labor Paid at a Prevailing Wage**

Liberty CalPeco, during its RFP process, will require in the bid documentation that any bidder must pay its employees or contractors a prevailing wage.

H. **The Pilot Will Be Conducted in a Safe Manner**

Liberty CalPeco has reviewed the Draft Safety and Requirements Checklist For Approved Transportation Electrification Program, and its vendors and subcontractors will abide by these safety requirements. Safety requirements will be addressed during the RFP process, vendor qualification process, and through Liberty CalPeco’s project management process during installation and commissioning of the charging stations.

I. **The Pilots Will Reduce GHG Emissions and Contribute to Air Quality Improvements**

To meet California’s ambitious GHG emission reduction targets, TE acceleration is absolutely necessary. The transportation sector accounts for more than 40% of California’s annual GHG emissions. Accelerating widespread TE, which Liberty CalPeco’s program aims to do, will contribute to reducing GHG emissions and improving air quality conditions.

IV. **REVENUE REQUIREMENT AND COST RECOVERY**

A. **Revenue Requirement**

To fully implement Liberty CalPeco’s AB 1082 and 1083 Pilots, Liberty CalPeco asks the CPUC to approve Liberty CalPeco’s request to recover the revenue requirements associated with $4.687 million in capital expenditures and operation and maintenance (“O&M”) expenses related to the AB 1082 and 1083 Pilots. A high level estimate of the incremental revenue requirement increase for the AB 1082 and 1083 Pilots is approximately $1 million.
B. **Cost Recovery**

In its Transportation Electrification Application (A.17-06-033), Liberty CalPeco proposed the establishment of a Transportation Electrification Balancing Account (“TEBA”). Liberty CalPeco proposes to separately record the AB 1082 and 1083 Pilots’ incremental revenue requirements in the TEBA. Each month, Liberty CalPeco will record the following in the TEBA: capital-related revenue requirements, including depreciation, return on rate base, property taxes, and income taxes based on recorded capital additions and rate base; recorded incremental O&M costs; and Pilot-related marketing and outreach costs. Liberty CalPeco proposes that it will seek recovery of the TEBA balance in an appropriate upcoming proceeding, via the advice letter process, or some other process to be approved by the Commission.

Because the Commission will perform a full review of the scope of the AB 1082 and 1083 Pilots’ activities and the forecast costs in this proceeding, reasonableness review of the TEBA should be limited to a review to confirm that all entries to the account are stated correctly and are associated with the AB 1082 and 1083 Pilots’ activities as defined and approved by the Commission.

C. **Rate Impacts**

Based on the high-level estimate of a $1 million incremental revenue requirement increase for the proposed AB 1082 and 1083 Pilots, the average increase to rates would be approximately 1.1% to overall rates.
Attachment A – LTCC Letter of Support for Pilot Program
July 18, 2018

Lake Tahoe Community College
One College Drive
South Lake Tahoe, CA 96150

To: California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Subject: AB1082/EV Charging for Schools
Letter of Support for Liberty Utilities

California Public Utilities Commission,

On behalf of Lake Tahoe Community College District (LTCCD), I am writing to express support for Liberty Utilities' proposed electric vehicle charging pilot program for the installation of vehicle charging stations at school facilities within its service territory.

LTCCD understands the importance of reducing dependence on petroleum, meeting California’s air quality standards and reducing emission of greenhouse gases. With this in mind, we are currently developing a Mobility Hub on our campus. This project will create a centralized transportation hub for use by LTCCD students, staff, community members and visitors to the South Lake Tahoe basin. New facilities will include a bus stop shelter with electric bus charging and an alternative transportation center that provides covered bicycle parking, bicycle and motorized scooter rentals, and a hub for other alternative transportation partners.

A key component to our site improvement vision is to provide electric vehicle charging for our campus community and for patrons of the Mobility Hub. In order to accomplish this, we need the financial support of Liberty Utilities and the California Public Utilities Commission to provide electric vehicle charging stations and related infrastructure. If approved, these improvements will be constructed in 2019 in coordination with our Mobility Hub project. We highly encourage the approval of the Liberty Utilities' pilot program in order to make this vision a reality.

Sincerely,

Russi Egan
Vice President, Administrative Services
Q. Please state your name and business address for the record.
A. My name is John Friedrich and my business address is 933 Eloise Ave., South Lake Tahoe, California 96150.

Q. Briefly describe your present responsibilities at Liberty Utilities (CalPeco Electric) LLC.
A. I am currently the Territory Manager, Business and Community Development for Liberty Utilities. I am responsible for helping develop new renewable energy, battery energy storage and electric vehicle charging projects, in regular consultation with Liberty CalPeco's largest customers, including school districts throughout our service territory.

Q. Briefly describe your educational and professional background.
A. I hold a Bachelor’s Degree in Business Administration from the University of Wisconsin-Madison. I have thirty years of experience in environmental program management, and related fields, with a significant focus on climate and renewable energy policy development and project implementation. Prior to my current position, I was the Senior Campaigner for Climate Parents, a program of Sierra Club, where I helped win passage of numerous pieces of state and local renewable energy legislation, including South Lake Tahoe and Truckee’s commitment to 100% renewable energy sources (both communities are in Liberty CalPeco’s service territory). I recently participated on the Lake Tahoe Unified School District sustainability committee, which adopted a goal of converting 50% of the district’s bus fleet to electric vehicles within three years. I have driven an electric vehicle for nearly four years throughout Liberty CalPeco’s service territory, where I live, which has provided me working knowledge of EV charging needs and opportunities.

Q. What is the purpose of your testimony in the proceeding?
A. The purpose of my testimony in this proceeding is to sponsor Liberty CalPeco’s testimony in support of its Electric Vehicle Charging at Schools, State Parks, and Beaches (AB 1082 & 1083) Application.

Q. Was this material prepared by you or under your supervision?
A. Yes, it was.

Q. Insofar as this material is factual in nature, do you believe it to be correct?
A. Yes, I do.

Q. Insofar as this material is in the nature of opinion or judgement, does it represent your best judgement?
A. Yes, it does.

Q. Does this conclude your qualifications and prepared testimony?

A. Yes, it does.