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Witnesses:	Travis Johnson

(U 933-E)

2019 General Rate Case

Before the California Public Utilities Commission

Chapter 1: Policy

Tahoe Vista, California

November 30, 2018

Liberty CalPeco-01: Policy

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I.

POLICY

A. Introduction

Due to technological advancements, an increased awareness of environmental impacts, and ambitious goals set by state and federal policymakers, the electric utility industry is transforming at an unprecedented rate. Technologies such as solar and wind power, battery storage, and smart grid are becoming more efficient, effective, and affordable every day. The reality of climate change and concern for the environment is causing customers to increasingly focus on energy efficiency and clean, renewable energy sources. In response to these changes, policymakers have set ambitious targets to significantly reduce the level of greenhouse gas emissions in California and the United States requiring utilities to increase usage of renewable resources and develop programs that promote the expansion of electric vehicles on the road.

At the same time, the core responsibility of electric utilities, providing safe and reliable power at reasonable rates, has not changed. To meet this responsibility, electric utilities must inspect, maintain, protect, upgrade, and monitor their electric infrastructure and employ a talented, dedicated, well-trained workforce to perform these functions.

Liberty Utilities (CalPeco Electric) LLC's ("Liberty CalPeco") request in this General Rate Case ("GRC") focuses on meeting the challenges ahead by delivering on its core responsibility of safe, reliable, and affordable electric service and developing a more modern, efficient, and cost-effective system to support the state's clean energy goals. While Liberty CalPeco serves less than 50,000 customers, our customers expect and deserve the same level of service and technological innovation as the customers of the larger electrical utilities.

Liberty CalPeco's modest rate increases over the period from 2019 to 2021 are essential to meeting customer expectations. Liberty CalPeco's average rates are currently the second lowest rates of all the electric utilities in California and will remain so even if its GRC request is adopted in full.

B. Liberty CalPeco Has Taken Steps to Meet Its Challenges

Over the last several years, Liberty CalPeco has taken a wide range of significant steps to meet its core responsibility of providing safe, reliable, and affordable service and to initiate projects and develop programs supporting state and federal clean energy goals.

1. Safety and Reliability

a) Infrastructure Replacement

Since Liberty Utilities purchased the utility from NV Energy in 2011, Liberty CalPeco has been working diligently to replace the aging infrastructure in place. Liberty CalPeco has been re-conductoring old lines and replacing archaic equipment to enhance the safety and reliability of its system. However, there is still a substantial volume of work to be done.

b) Fire Safety

Liberty CalPeco has been an active participant in the Commission's Fire Safety OIR (R.15-05-006) and has adopted the more stringent policies from that proceeding to help mitigate the risk of fires in its service territory.

Liberty CalPeco also commenced removal of dead and dying trees that could potentially impact its lines. The Sierra Nevada region is facing a significant crisis of tree mortality brought on by the state's long-term drought conditions which make trees susceptible to epidemic infestations of native bark beetles. The dead and dying trees have heightened the risk of fires to unprecedented levels and have contributed to the widespread fires seen throughout California in recent years. Liberty CalPeco's service territory contains two of the ten highest priority counties identified by California's Tree Mortality Task Force as tree mortality in these two counties has grown exponentially since 2015. In Placer County, tree mortality increased from 80,000 dead trees in 2015 to 557,000 dead trees in 2016. In El Dorado Country tree mortality increased from 200,000 dead trees in 2015 to 1,359,000 dead trees in 2016. On July 5, 2017, Liberty CalPeco activated its Catastrophic Event Memorandum Account ("CEMA") to record costs of addressing tree mortality in its service territory and these efforts are expected to continue.

c) Reliability Issues in Alpine County

Due to Alpine County's geography and the fact that the only source for electric supply for Alpine County is one radial distribution line, Alpine County customers experience longer and more frequent power outages than the average Liberty CalPeco customer. As many of Alpine County's customers reside at elevations of 5,500 feet or more and are dependent on electricity for heating, sustained outages pose a substantial life safety issue, particularly during cold winter months. To address this issue, Liberty CalPeco plans to build a 2.6-megawatt ("MW")/15 megawatt-hour ("MWh") battery energy storage system ("BESS") in the Alpine County town of Markleeville. Installing a BESS in Alpine County will improve the safety and reliability of electric service for customers to levels more comparable to those of the systems serving customers in the rest of Liberty CalPeco's service area. This project was identified in Liberty CalPeco's Application (A.17-11-014) and the project costs are requested in this GRC application.

2. Meeting Clean Energy Goals

Liberty CalPeco has undertaken several projects and programs to help California meet its clean energy goals, including the construction of two solar facilities and transportation electrification, energy efficiency and solar incentive programs. In addition, Liberty CalPeco's current power purchase agreement with NV Energy eliminates coal-fired generation from the portfolio mix of generation provided to Liberty CalPeco.

a) Renewable Energy Projects

Under an innovative tax equity model, Liberty CalPeco has constructed one utility-owned solar project, the 50 MW Luning facility, and is currently constructing a second utility-owned solar plant, the 10 MW Turquoise facility, which is expected to go into service in early 2019. In utilizing these federal tax incentives, Liberty CalPeco is able to complete these projects at dramatically reduced cost benefiting Liberty CalPeco customers and contributing to Liberty CalPeco's effort to meet California's Renewable Portfolio Standard ("RPS") in a more cost-effective manner. The 60 MW the two facilities produce will serve approximately 30% of Liberty CalPeco's load.

Under the terms of its energy services agreement with Sierra Pacific Power Company d/b/a NV Energy ("NV Energy"), Liberty CalPeco is limited to owning 60 MW of renewable capacity with the

remainder of energy purchases to be made from NV Energy. On January 31, 2018, Liberty CalPeco exercised its early termination option under the NV Energy agreement with termination to be effective on May 1, 2019 (approximately a year and a half prior to its full term through December 30, 2020.) Liberty CalPeco exercised this early termination option for several reasons, including: (i) the 60 MW limit on Liberty CalPeco-owned renewable generation, (ii) the declining availability of tax credits to support renewable generation projects, (iii) the uncertainty of the renewable energy market in Nevada and (iv) certain undesirable characteristics included in the agreement, including a "ratchet" on demand charges. The early termination will also support the desires of Liberty CalPeco customers to be served by more renewable generation.

Liberty CalPeco could not afford to wait until 2021 to have the 60 MW limit lifted as constructing renewable resources requires significant lead time and the uncertainty of future availability of the tax credits risks higher costs of renewable energy for Liberty CalPeco customers. Liberty CalPeco also took action, since its customers have been paying a demand charge unrelated to actual demand for NV Energy-supplied power, due to a ratchet in the agreement that locks demand charges at historic monthly peaks rather than actual monthly demand. Additionally, many of Liberty CalPeco's largest customers have made commitments to go 100% renewable and the product mix provided in the NV Energy agreement did not allow for Liberty CalPeco's customers to meet those commitments.

Over the short-term, Liberty CalPeco expects to procure energy from a third-party at similar (or lower) costs as those charged under the NV Energy agreement. Over the long-term, Liberty CalPeco's construction of its own renewable generation resources support Liberty CalPeco's goal of providing 100% renewable energy to its customers, something that both customers demand and that California requires by 2045.

b) Energy Efficiency and Solar Incentive Programs

Liberty CalPeco's programs to increase efficiency and lower overall energy usage have shown great success. Liberty CalPeco's Energy Efficiency program includes residential and small commercial energy audits, LED lighting distribution, public school incentives, and appliance rebates. The Solar

Incentive Program provides incentives to customers that install solar panels on their homes or businesses.

Both the Energy Efficiency and Solar Incentive Programs are worthy programs that are reducing overall energy usage and saving Liberty CalPeco customers money. Liberty CalPeco is requesting a higher level of funding in this GRC to support expansion of both of these programs.

C. <u>The Projects and Programs Included in this GRC Are Critical to Meeting Its Goals</u>

In this GRC, Liberty CalPeco forecasts capital expenditures of approximately $117 million from 2019 to 2021. Of that amount, approximately $66 million is tied to infrastructure and equipment replacements supporting reliability improvements supporting customer and employee safety. Another significant portion (totaling approximately $37 million) is for new technologies that will allow for future increased integration of renewable energy, including two battery storage projects, transportation electrification projects, and Advanced Metering Infrastructure ("AMI"). The next significant portion (totaling approximately $10 million) is for customer-driven programs, such as Rule 20 projects and new customer connections. The capital projects are discussed in detail in Mr. Jeff Matthews' testimony in Chapter 2.

Liberty CalPeco's capital projects and programs are necessary to meet the current challenges of providing safe and reliable power and to expand our utilization of clean and efficient renewable energy. These capital projects and programs will continue Liberty CalPeco's journey to fully realizing its goal of providing 100% of its energy via clean, renewable generation resources and future applications will cover additional expenditures to support such capital projects and programs. Liberty CalPeco has initiated the process of using use of risk-based decision-making to develop and manage its capital investment plans going forward. Liberty CalPeco discusses its current risk-based decision-making framework later in this chapter. By its next GRC, Liberty CalPeco projects implementation of a more robust program identifying and evaluating risks and mitigating impacts of the proposed capital projects and programs.

D. Liberty CalPeco's Rate Increases are Modest

As shown in Table I-1, Liberty CalPeco is requesting an 8.0% increase to its authorized revenue requirement in 2019, a 6.5% increase in 2020, and a 4.0% increase in 2021. Liberty CalPeco's request is an average annual rate increase of approximately 6%.

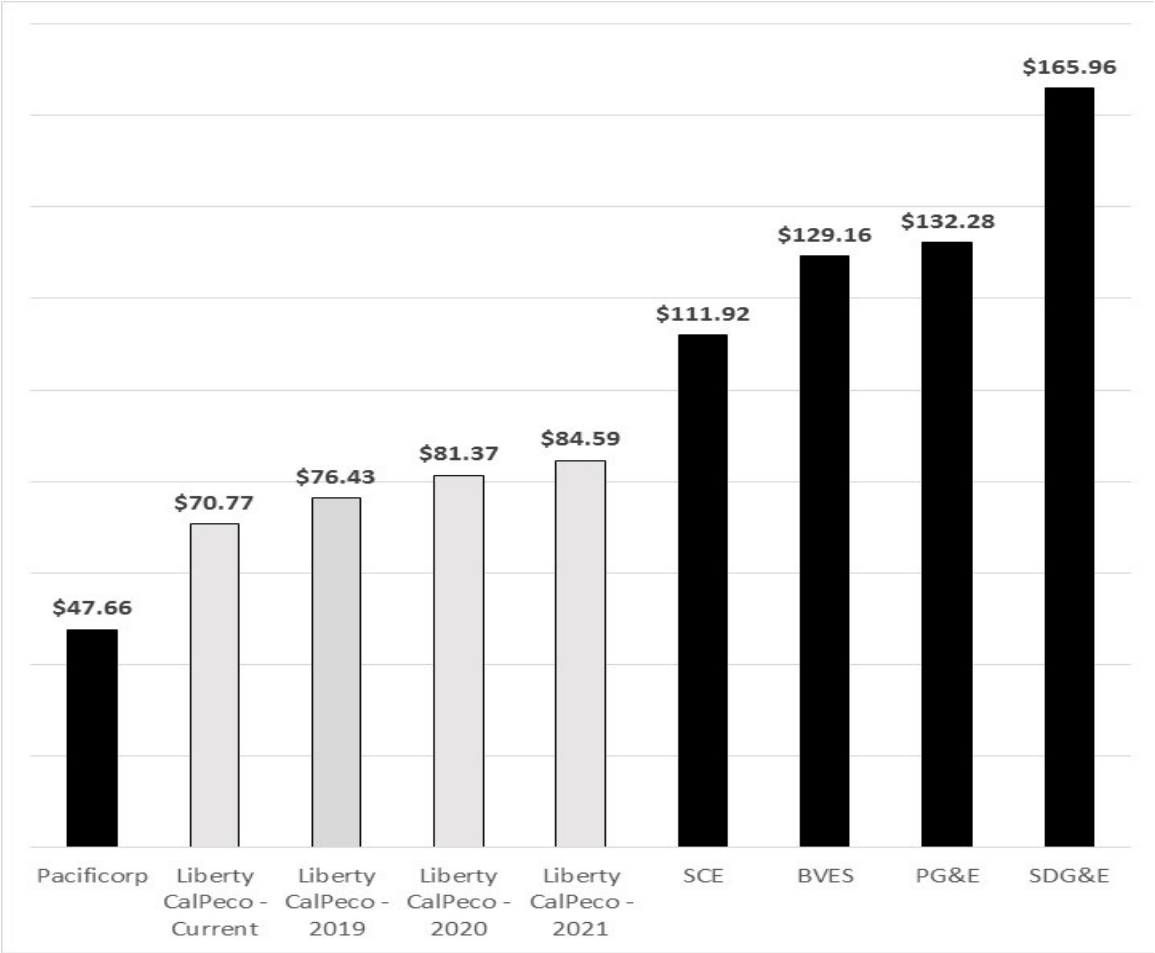
Table I-1
Revenue Requirement Forecast (2019-2021)

	2019	2020	2021
Revenue Requirement			
Base Revenues	64,073	69,982	74,773
ECAC	17,787	17,787	17,787
Public Purpose Programs	6,811	6,761	5,793
Other	2,053	2,053	2,053
Total Revenue Requirement	90,723	96,583	100,406
Rate Increase Request			
Base Rates	8,455	5,909	4,791
ECAC	(4,484)	-	-
Public Purpose Programs	2,746	(50)	(968)
Other	-	-	-
Total Rate Increase	6,718	5,859	3,823
% Rate Increase	8.0%	6.5%	4.0%

E. Liberty CalPeco's Average Customer Rates Are Low

In comparison to the other five investor owned electric utilities in California, Liberty CalPeco currently has the second lowest average rates. As shown in Figure I-1 below, even when Liberty CalPeco's requested rate increase in this GRC is included, its rates will remain the second lowest average rates in the state. Liberty CalPeco is committed to providing its customers with a high level of safe and reliable service at a reasonable cost.

Figure I-1
Average Residential Rates



F. Risk-Based Decision-Making Framework (D.14-12-025)

1. Current Process

Risk management is a top priority for Liberty CalPeco. Liberty CalPeco puts a great deal of effort into recognizing risks and controlling those risks through teamwork. The concept of identifying, assessing, and mitigating risks and communicating issues related to those risks is an important aspect of doing business affecting all levels of the company. Liberty CalPeco has and will continue to have an active risk management program to make informed decisions about all of its operations, including capital improvements.

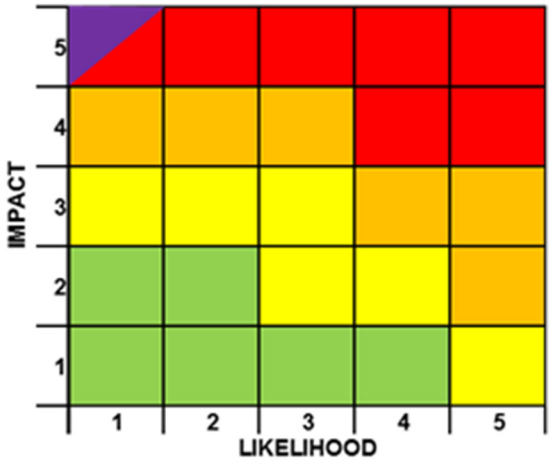
Liberty CalPeco has an extensive Enterprise Risk Management ("ERM") structure. At the highest level, risk management is addressed by its ultimate parent company, Algonquin Power and Utilities Corporation ("APUC"). The Risk Committee of the APUC Board of Directors evaluates risks and fosters controlling risks as a primary consideration in decision making processes organization-wide. The ERM Council on the executive level of APUC is comprised of members of executive management, internal audit and the ERM Team. The ERM Team includes the Director of Risk Management and risk advisors from the various regions to cover each part of the company. For Liberty CalPeco, the Liberty Utilities West Region Risk Advisor oversees the evaluation and mitigation of risks for the west region of Liberty Utilities, consisting of regulated utility operations in California, Arizona and Texas. Each of the utilities in the West Region, including Liberty CalPeco, have a designated Risk Champion to identify and communicate the specific risks for the different operating units.

The ERM process consists of a repetitive cycle of identifying, assessing, mitigating and communicating risks. Risks are identified using a top-down and a bottom-up approach to classify the greatest areas of concern. All employees are encouraged to be the eyes of the company and to follow the guideline of, if you see something, say something. Employees are also instructed on multiple ways to quickly and easily report on any risks they observe. Risks are assessed using the ERM impact and likelihood scales. Risks are assessed both inherently, assuming that no controls are in place, and residually, which addresses the existing controls that are in place. For any risks that fall outside of a reasonable range, mitigation plans are developed to better control those risks. Throughout the process, there is ongoing communication of the top risks and their controls at all levels. Another important aspect of this ERM process is making sure that the effectiveness of controls are verified by such things as evaluating indicators, which are events that occur, such as outages, that are indicators of the effectiveness of related controls.

The ERM impact and likelihood scales are based on a 1 to 5 scale for likelihood and a 1 to 5 scale for impact. A low number for likelihood indicates a risk event is not very likely to occur while a high number indicates a risk that is more likely to occur. A low number for impact indicates that the consequences of a risk event occurring is low and a higher number indicates higher consequences if a

risk event occurs. The rating for likelihood and impact are multiplied together to come up with a risk score. That score is then plotted on a chart to create a risk heat map. The chart is color coded with green indicating low risk grades and red indicating high risk grades. In Figure I-2 below shows what a heat map looks like.

Figure I-2
Heat Map



When evaluating risk impacts, Liberty looks at five impact categories. Those categories are (i) safety, (ii) legal compliance, (iii) strategic, (iv) reputational, and (v) financial. Each risk is evaluated and scored in each category and then the highest score is used to multiply by the impact score to compute the risk rating. Criteria for developing the scores are defined to promote consistency of the assessments. When a risk is plotted on the heat map, it is designated a risk grade. The heat map, when populated with the top risk grades, provides a way to quickly review the various risks and their scores.

Details about the various risks are documented in a risk register that includes information about risks, sub-risks, assumptions, scoring, in-place controls and mitigation options. As the ERM process continues, risk information and the methods for controlling those risks are refined and communicated to decision makers. Although all the risks associated with operating an electric utility cannot be eliminated, the process of managing those risks helps make key decisions, including those relating to capital investment and system operations.

Liberty CalPeco's risk management process multiple steps including:

- Risk identification including brainstorming sessions with operations managers and leaders, developing risk register;
- Analysis – including appropriate risk ownership within the organization, worst case scenarios, likelihood, and impacts;
- Evaluation and scoring to focus on the most significant to safety and reliability;
- Decision making – including mitigation plans and incorporating risk mitigation in capital and operating plans;
- Monitoring – including the establishment of controls to monitor risks.

2. <u>Top Risks Facing Liberty CalPeco</u>

One of the top risks for Liberty CalPeco are catastrophic public safety incidents. Example of such incidents include a (i) a trespasser getting onto a site and being electrocuted, (ii) a failure of aging infrastructure that causes physical harm to a member or members of the public, (iii) downed power lines resulting in injury to a member or members of the public, and (iv) a wild fire cause by company operations. Liberty CalPeco is making strides to mitigate various aspects of this risk with such things as improving site security and public education and an aggressive vegetation management program.

Another top risk is natural disasters such as a wildfire or a severe storm. As an example, in January 2017, a major winter storm had significant impact on Liberty CalPeco's service territory. Efforts to mitigate this risk include such things as maintaining and improving the system reliability via replacement of aged or undersized equipment, the addition of protective devices and remote controlled equipment and the creation of loops and alternative power sources and routes.

3. <u>Mitigations Proposed in this GRC</u>

- In this GRC, Liberty CalPeco's operating and capital plans includes a number of activities and projects to mitigate risks. For example, the Vegetation Management activities will mitigate risks of wildfires. The various reconductoring projects (including the 625/650 Line Upgrade Project) are designed to mitigate against

extended outages and wildfires and the related hazards to customers and the public at large.

- The SCADA conversion project will allow Liberty CalPeco to better monitor outages and equipment failures and mitigate customer, employee and public safety risks associated therewith.

4. Liberty CalPeco's Future Plans for Risk-Based Decision-Making

Liberty CalPeco recognizes that there are far more needs for system improvements to address the risk associated with operating its electric system. With that in mind, the submitted budget includes only top priority items to address the most pressing needs. Liberty CalPeco is also actively participating in various Commission rulemakings that are specifically addressing risks, such as the Wildfire Mitigation rulemaking, the Physical Security rulemaking, the Climate Change Adaptation rulemaking, and the Pole Safety rulemaking, all of which will most likely result in industry changes that will reduce risks and improve utility safety.

Liberty CalPeco is committed to developing a comprehensive risk-based decision-making model and process that will be the basis for ongoing capital and O&M planning in time for its next GRC. Liberty CalPeco will work with Energy Division and other stakeholders to develop this model.

G. Tax Memorandum Account

In Liberty CalPeco's last general rate case decision (D.16-12-024), Ordering Paragraph No. 6, Liberty CalPeco was ordered to "…establish a tax memorandum account to record any revenue differences resulting from the income tax expenses forecasted in their general rate case (GRC) proceedings, and the tax expenses incurred by Liberty during this (2016-2018) and each subsequent GRC period. This tax memorandum account shall remain open and the balance in the account should be reviewed in every subsequent GRC until a Commission decision closes the account…."

As a result of the Tax Cuts and Jobs Act of 2017, Liberty CalPeco is still in the process of evaluating and estimating the impact that this Act has on its Tax Memorandum Account. During the course of this proceeding, as Liberty CalPeco updates its Tax Memorandum Account, it will supplement this filing with the updated information.

H. Summary of Request

Liberty CalPeco's GRC application requests that the Commission authorize the following:

- The following proposed revenue requirements:
  - 2019: $90.723 million, an increase of $6.718 million or 8.00 percent, effective 1/1/19
  - 2020: $96.583 million, an increase of $5.859 million or 6.46 percent, effective 1/1/20
  - 2021: $100.406 million, an increase of $3.823 million or 3.96 percent, effective 1/1/21
- A $4.484 million reduction to the Cost Adjustment Clause ("ECAC") revenues in 2019
- An annual increase of $1.477 million to its vegetation management program budget
- An annual increase of $0.320 million to implement its Energy Efficiency programs
- An annual increase of $0.614 million to implement the Solar Incentive Program.
- An authorized Return on Equity of 10.3 percent resulting in an Overall Rate of Return of 7.79 percent
- A debt/equity structure of 47.5 percent/52.5 percent
- Authority to maintain its GRC Memorandum Account to track the difference between authorized and recorded 2019 sales revenues.

Appendix A

Witness Qualifications

LIBERTY UTILITIES (CALPECO ELECTRIC) LLC

QUALIFICATIONS AND PREPARED TESTIMONY

OF TRAVIS JOHNSON

Q. Please state your name and business address for the record.

A. My name is Travis Johnson and my business address is 701 National Avenue, Tahoe Vista, California 96148.

Q. Briefly describe your present responsibilities at Liberty Utilities (CalPeco Electric) LLC.

A. I am currently the Vice President of Operations for Liberty Utilities (CalPeco Electric) LLC, ("Liberty CalPeco") and am responsible for Liberty CalPeco's operations.

Q. Briefly describe your educational and professional background.

A. I graduated from the University of Nevada, Reno in 1993 with a Bachelor of Science Degree in Electrical Engineering. I am a registered Professional Engineer in the state of California. I have held a variety of positions in the Electric Utility Industry at Liberty and NV Energy, including EV/Renewable Energy Program Manager, Substation Construction & Maintenance Manager, and various Engineering roles.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to sponsor Chapter 1 – Policy.

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.