Investigation No. 17-04-019
Exhibit No. PAC/400-I
Witness: Mary M. Wiencke

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

PACIFICORP

Chapter 4

Direct Testimony of Mary M. Wiencke

Redline Version

ERRATA

December 2018

CHAPTER 4

PACIFICORP'S COMPLIANCE WITH THE CALIFORNIA EMISSIONS PERFORMANCE STANDARD

Testimony of Mary M. Wiencke

A. INTRODUCTION

PacifiCorp has complied with the applicable requirements of the Emissions Performance Standard (EPS) adopted by the Public Utilities Commission for the State of California (Commission or CPUC). Public Utilities Code § 8340 *et seq.*, added by Senate Bill 1368, established a minimum emission performance requirement for any long-term financial commitment for baseload generation that will be supplying power to California customers. The purpose of the EPS is to reduce California's financial risk exposure to the compliance costs associated with future GHG emissions and associated future reliability problems in electricity supplies.[1] SB 1368 directed the Commission to adopt an EPS for, among other entities, all electrical corporations serving end-use customers in California. The law required the greenhouse gas emission rates for new facilities must be no higher than the greenhouse gas emission rate for combined-cycle natural gas baseload generation.

SB 1368 described the types of generation and financial commitments subject to the EPS. The EPS applies to baseload generation, and is triggered only if there is a long-term financial commitment by a utility. Baseload generation is electricity generation from a power plant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent. A long-term financial commitment occurs when there

[1] D. 07-01-039, p. 3.

is a new ownership investment, or, for purchased power, when there is a new or renewed contract with a term of five or more years.

For baseload power plants currently in operation, all combined-cycle natural gas power plants in operation as of June 30, 2007 are deemed compliant with the EPS. For other baseload generation, the new ownership investment trigger under the EPS is any investment intended to extend the life of one or more units of an existing baseload power plant for five years or more, or that results in a net increase in the existing rated capacity of the power plant. The Commission expressly rejected proposals that compliance with the EPS be required any time a utility seeks rate modification or submits procurement plans supporting retained baseload generation, irrespective of whether new investments are made to those facilities.[2]

The Legislature also recognized the unique conditions faced by multi-jurisdictional utilities and adopted an alternative compliance approach for electrical corporations that serve fewer than 75,000 retail customers in California. To meet the alternative compliance approach, the electrical corporation must show both of the following: (1) a majority of its retail customers are outside California; and (2) the greenhouse gas emissions to generate electricity for the retail end-use customers of the electrical corporation are subject to review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service. The Commission further refined the requirements for alternative compliance in requiring that the utility be subject to one of three kinds of greenhouse gas emissions-related regulation (specifically, reporting on greenhouse gas policies in its integrated resource planning (IRP) process, disclosure of greenhouse gas

[2] Decision (D.) 07-01-039 at 47.

emissions or change in overall emissions from changes in its resource portfolio, or rules specifically regulating emissions of greenhouse gases from electricity generation facilities).[3]

In D. 07-01-039, the Commission concluded that PacifiCorp met the alternative compliance requirements described above. In accordance with D. 07-01-039, PacifiCorp files an annual attestation of compliance on February 1 of each year attesting that PacifiCorp continues to meet the alternative compliance requirements of SB 1368. Each year, in response to PacifiCorp's attestation, the Commission has issued a letter to PacifiCorp indicating that its advice letter is effective.[4]

B. ALTERNATIVE COMPLIANCE APPROACH

PacifiCorp meets the approved alternative compliance approach because a majority of PacifiCorp's retail customers are outside California and PacifiCorp's greenhouse gas emissions are subject to review in three of its six state jurisdictions other than California. In D. 07-01-039 the Commission adopted PacifiCorp's proposed alternative compliance framework, which meets the requirements of Public Utilities Code section 8341(d)(9) when any of the following occur: (1) a state jurisdiction in which PacifiCorp operates requires PacifiCorp to review and report on the potential impacts of different carbon policies within its IRP process; or (2) a state jurisdiction in which PacifiCorp operates requires PacifiCorp to disclose its GHG emissions or expected change in overall emissions as a result of changes to its portfolio, including new capacity additions; or (3) when a state jurisdiction in which PacifiCorp operates adopts rules specifically regulating emissions of GHGs from electricity generating facilities.[5] The Commission found that PacifiCorp's proposal closely tracked the

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[3] *Id.* at 165.
[4] PacifiCorp's compliance filings are included as Exhibit PAC/1100-I.
[5] D. 07-01-039, pp. 165–166.

statutory language of SB 1368 and appeared consistent with Commission Staff's final recommendations.[6] As is fully described below, PacifiCorp meets all of the statutory and Commission-refined requirements for alternative compliance in one of more of PacifiCorp's states.

1. Reporting on Greenhouse Gas Policies in the IRP Process

Under Public Utility Commission of Oregon (OPUC) IRP Guidelines, utilities are required to include, in their base-case analyses, the regulatory compliance costs they expect from CO_2 emissions.[7] Though the OPUC's IRP guidelines were most recently updated in 2007, the requirement to include an analysis of carbon costs in a resource planning process has been in place since 1993.[8] Since 1992, the Utah Public Service Commission has required PacifiCorp to consider the financial risk of potential future regulations, including carbon regulation.[9] Under its IRP rules, the Washington Utilities and Transportation Commission also requires the assessment of risks associated with environmental effects including emissions of carbon dioxide.[10]

2. Disclosure of Greenhouse Gas Emissions or Changes in Overall Emissions from Changes in the Resource Portfolio

As part of its IRP process, PacifiCorp assesses the emissions impacts of the preferred portfolio and discloses the expected change in overall emissions as a result of changes to its portfolio, including capacity additions.[11] PacifiCorp's IRP is filed in California as part of its

[6] *Id.* at Finding of Fact No. 169.
[7] *Investigation into Integrated Resource Planning Requirements*, OPUC Docket No. UM 1056, Order No. 07-047 at Appendix A, p. 6 (Feb. 9, 2007).
[8] *Re The Development of Guidelines for the Treatment of External Environmental Costs,* OPUC Docket No. UM 424, Order No. 93-695 (May 17, 1993).
[9] *Re PacifiCorp,* Utah Public Service Commission Docket No. 90-2035-01, Order (September 3, 1991).
[10] Washington Administrative Code (WAC) 480-100-238(2)(b) (http://apps.leg.wa.gov/wac/default.aspx?cite=480-100-238).
[11] *See e.g.*, PacifiCorp 2017 IRP at pp. 230–231, 243 (http://www.pacificorp.com/es/irp.html).

renewable portfolio standard compliance and is reviewed by all five of PacifiCorp's other state jurisdictions.

3. Rules Specifically Regulating Emissions of Greenhouse Gases from Electricity Generation Facilities

Both Oregon and Washington specifically regulate emissions of greenhouse gases from electricity generation facilities. Both Oregon and Washington adopted EPS frameworks similar to California's, and, in addition, Washington adopted the Clean Air Rule, which regulates greenhouse gas emissions from point sources in Washington. Washington adopted an EPS in 2007 prohibiting electrical companies from entering into a long-term financial commitment (new ownership interest in or an upgrade of a generating facility, or a new or renewed contract for a term of five years or more) unless the baseload electric generation supplied under such a long-term financial commitment complies with the greenhouse gas emissions performance standard.[12] Oregon adopted an EPS in 2009 prohibiting electric companies entering into a long-term financial commitment (investment in or upgrade of a generating facility that produces baseload electricity, or a contract with a term of more than five years) unless the baseload electricity acquired under the commitment is produced by a generating facility that complies with a greenhouse gas emissions standard.[13] In Oregon, the emissions performance standard is 1,100 pounds CO_2 per MWh and in Washington it is 970 pounds CO_2 per MWh.

[12] Revised Code of Washington 80.80.060(1) (http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.060).
[13] Oregon Revised Statutes 757.536(1)(a) (https://www.oregonlegislature.gov/bills_laws/ors/ors757.html).

Washington's Clean Air Rule, adopted in 2015, establishes a declining emissions cap from 2017–2035 for point sources over a certain emissions threshold.[14] PacifiCorp's Chehalis Generation Facility, a combined cycle natural gas unit in Chehalis, Washington, is subject to the Clean Air Rule.

C. GREENHOUSE GAS EMISSIONS AND PACIFICORP'S SYSTEM OPERATIONS

PacifiCorp operates its six-state system on an integrated basis—PacifiCorp resources are optimized on an integrated basis for all PacifiCorp customers. Further information regarding PacifiCorp's system operations can be found in the testimony of ~~Shayleah J. LaBray~~Rick T. Link and Joseph P. Hoerner.

1. PacifiCorp Resources Serving California Load

PacifiCorp operates its entire system on an integrated basis and therefore, California is allocated a portion of PacifiCorp's entire system.[15] Accordingly, as a multi-jurisdictional utility, the costs and wholesale revenues associated with PacifiCorp's generation, transmission, and distribution system are allocated among its six state jurisdictions (California, Idaho, Oregon, Utah, Washington, and Wyoming) for purposes of establishing retail rates.[16]

2. PacifiCorp System Emissions Factor

As a multi-jurisdictional retail provider (MJRP) under the California Air Resources Board (ARB) Mandatory Greenhouse Gas Reporting Regulation (MRR), PacifiCorp provides a system emission factor that is used to calculate PacifiCorp's California cap-and-trade compliance obligation associated with its retail load. This calculation is performed

[14] WAC Chapter 173-442, generally, WAC 173-442-030 identifies the declining emissions cap (http://apps.leg.wa.gov/wac/default.aspx?cite=173-442).
[15] *See* Testimony of Joseph P. Hoerner and ~~Shayleah J. LaBray~~Rick T. Link.
[16] *See* Testimony of Steven R. McDougal.

consistent with subsection 95111(b)(3) of the MRR. PacifiCorp's 2016 emissions factor, which is the most recent available and verified, was 0.6871 metric tons (MT) carbon dioxide equivalent (CO_2e) per megawatt-hour (MWh).

As noted above, PacifiCorp's entire system serves California load. Accordingly, the emissions factor for resources that serve California customers is consistent with PacifiCorp's system emission factor of 0.6871 MT CO_2e/MWh. Exhibit PAC/1200-I to my testimony includes a list of PacifiCorp's thermal resources, both company-owned or under contract. For each resource, the annual CO_2 emission factor and capacity factor since PacifiCorp's last general rate case are provided, along with the useful life of the facility. For resources under contract, the annual CO_2 emission factor is provided, as well as the current contract term and date of the last amendment, and an estimate of each facility's capacity factor. PacifiCorp's system emission factor is calculated as part of California's MRR program and is unrelated to the EPS as currently implemented, which only applies to incremental long-term financial commitments.

3. <u>PacifiCorp Long-Term Financial Commitments Since the Adoption of D.07-01-039</u>

Notwithstanding PacifiCorp's alternative compliance with California's EPS, since the CPUC adopted D.07-01-039, PacifiCorp has not made any new long-term financial commitments with baseload generators that have emissions in excess of 1,100 pounds of CO_2 per MWh.[17]

D. IMPACTS OF REGULATION IN OTHER STATES

The depreciation schedules for PacifiCorp's coal-fired generation facilities in Oregon

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[17] *See* Exhibit PAC/1200-I.

and Washington~~[18]~~ are accelerated, relative to PacifiCorp's other states.[19] Oregon Senate Bill 1547, Oregon's Clean Electricity and Coal Transition Plan, requires PacifiCorp to eliminate coal-generated electricity from Oregon's retail rates by not later than 2030 and increases the state's renewable portfolio standard to 50 percent by 2040. The differing depreciable lives of coal-fired generation facilities and Oregon SB 1547 do not impact PacifiCorp's compliance with the California EPS.

E. CONCLUSION

In summary, PacifiCorp has complied with California's EPS both through the alternative compliance option as well as by following the prohibition on entering into new long-term financial commitments that exceed the EPS.

~~[18] For Oregon, this includes the following baseload generation facilities: [INSERT]; for Washington, this includes the following baseload generation facilities. Washington has a limited number of baseload generation facilities in rates as the result of its unique inter-jurisdictional cost allocation methodology, the West Control Area, that does not recognize certain portions of PacifiCorp's integrated system as used and useful to Washington customers.~~

[19] Mr. McDougal discusses the differing depreciation lives for PacifiCorp's coal-fired generation resources in Chapter 3.

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3. <u>PacifiCorp Long-Term Financial Commitments Since the Adoption of D.07-01-039</u>

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[18] Mr. McDougal discusses the differing depreciation lives for PacifiCorp's coal-fired generation resources in Chapter 3.