Investigation No. 17-04-019 Exhibit PAC/1400-I Witnesses: Mary M. Wiencke

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

PACIFICORP

Rebuttal Testimony of Mary M. Wiencke

Redline Version

ERRATA

December 2018

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ATTACHED EXHIBITS

Exhibit PAC/1401-I - Alternate Emissions Performance Standard Compliance Filing February 1, 2018

Confidential Exhibit PAC/1402-I - Capital Investments in Environmental Equipment

| 1 | Q. | Please state your name, business address, and position with PacifiCorp d/b/a |
|----|---------------|---|
| 2 | | Pacific Power. |
| 3 | А. | My name is Chad A. Teply. My business address is 1407 West North Temple, Suite |
| 4 | | 310, Salt Lake City, Utah 84116. My present position is Senior Vice President of |
| 5 | | Strategy and Development. |
| 6 | | I. QUALIFICATIONS |
| 7 | Q. | Please describe your education and business experience. |
| 8 | <u>A.</u> | I have a Bachelor of Science Degree in Mechanical Engineering from South Dakota |
| 9 | | State University. I have held positions of increasing responsibility within various |
| 10 | | Berkshire Hathaway Energy companies since November 1999. I joined PacifiCorp in |
| 11 | | February 2009 as Vice President of Resource Development and Construction, and I |
| 12 | | undertook the role of Senior Vice President of Strategy and Development in 2017. I |
| 13 | | am responsible for strategic planning, stakeholder engagement, regulatory support, |
| 14 | | and development and implementation of the company's major generation resource |
| 15 | | additions, major environmental compliance projects, and major transmission and |
| 16 | | distribution projects.Q. Are you the same Mary M. Wiencke who submitted |
| 17 | | direct testimony in this proceeding? |
| 18 | <u>A.</u> | Yes, I am. |
| 19 | | HI . PURPOSE OF TESTIMONY |
| 20 | Q. | What is the purpose of your testimony? |
| 21 | А. | The purpose of my testimony is to provide clarification regarding PacifiCorp's |
| 22 | | alternative compliance mechanism with California's Emissions Performance Standard |
| 23 | | (EPS) under Senate Bill (SB) 1368 and California Public Utilities Commission |
| | | |

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| 1 | | (Commission) Decision (D.) 07-01-039. I am also adopting testimony provided by |
|----|----|---|
| 2 | | Ms. Mary M. Wiencke, Vice President of Environmental Strategy and Policy for |
| 3 | | PacifiCorp, filed as Exhibit PAC/400-I PacifiCorp's Compliance with the |
| 4 | | California Emissions Performance Standard, on November 8, 2017. |
| 5 | | III. COMPLIANCE WITH SB 1368 |
| 6 | Q. | How has PacifiCorp complied with SB 1368? |
| 7 | A. | As discussed <u>I discuss</u> in the portion of the testimony of Mr. Scott D. Bolton <u>I share</u> |
| 8 | | with Ms. Lockey (Exhibit PAC/1300-I), SB 1368 ¹ provided the Commission the |
| 9 | | discretion to approve an alternate compliance option for an electrical corporation that |
| 10 | | provides electric service to 75,000 or fewer retail end-use customers in California |
| 11 | | where: (A) a majority of the electrical corporation's end use customers for electric |
| 12 | | service are located outside of California; and (B) the emissions of greenhouse gasses |
| 13 | | (GHG) to generate electricity for the retail end-use customers of the electrical |
| 14 | | corporation are subject to a review by the utility regulatory commission of at least one |
| 15 | | other state in which the electrical corporation provides regulated retail electric |
| 16 | | service. ² In D.07-01-039, the Commission adopted PacifiCorp's proposed alternative |
| 17 | | compliance framework finding that a utility serving fewer than 75,000 customers in |
| 18 | | California meets the requirements of Public Utilities Code section 8341(d)(9) when |
| 19 | | any of the following occur: (1) a state jurisdiction in which PacifiCorp operates |
| 20 | | requires PacifiCorp to review and report on the potential impacts of different carbon |
| 21 | | policies within its IRP process; or (2) a state jurisdiction in which PacifiCorp operates |
| 22 | | requires PacifiCorp to disclose its GHG emissions or expected change in overall |

Rebuttal Testimony of Chad A. TeplyMary M. Wiencke

¹ Pub. Util. Code §§ 8340 and 8341. ² Pub. Util. Code § 8341(d)(9).

| | | 1 2 |
|----|----|--|
| 1 | | emissions as a result of changes to its portfolio, including new capacity additions; or |
| 2 | | (3) when a state jurisdiction in which PacifiCorp operates adopts rules specifically |
| 3 | | regulating emissions of GHGs from electricity generating facilities. ³ The |
| 4 | | Commission found that PacifiCorp met these requirements and required PacifiCorp to |
| 5 | | file an annual Advice Letter in February of each year, attesting to the fact that |
| 6 | | PacifiCorp continues to meet the alternative compliance requirements of SB 1368.4 |
| 7 | Q. | Does PacifiCorp still meet the alternative compliance requirements? |
| 8 | A. | Yes. PacifiCorp currently serves approximately 45,000 retail electric customers in |
| 9 | | California, which represents less than 2 percent of PacifiCorp's total retail electric |
| 10 | | load. PacifiCorp's GHG emissions continue to be subject to review by the regulated |
| 11 | | utility commissions in other states, principally Oregon and Washington. ⁵ Per the |
| 12 | | Commission's requirement, PacifiCorp has filed an annual Advice Letter in February |
| 13 | | of each year, attesting to the fact that PacifiCorp continues to meet the alternative |
| 14 | | compliance requirements of SB 1368. The Advice Letters PacifiCorp has filed since |
| 15 | | its SB 1368 alternative compliance mechanism began in 2008 through 2018 are |
| 16 | | contained in Exhibit PAC/1100-I and Exhibit PAC/1401-I, along with the documents |
| 17 | | confirming the Commission's approval of each Advice Letter. |
| 18 | Q. | What are PacifiCorp's EPS requirements in Oregon? |
| 19 | A. | In Oregon, the GHG emissions standard applicable to electric companies and electric |
| | | |

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service suppliers is 1,100 pounds of GHGs per megawatt-hour for a generating

³ D.07-01-039, pp. 165–166.
⁴ See Exhibit PAC/1100-I and Exhibit PAC/1401-I.
⁵ See Oregon Revised Statutes (ORS) 757.522 et al; Revised Code of Washington (RCW) 80.80.005 et al.

| 1 | facility. ⁶ An electric company may not enter into a new long-term financial |
|----------------------------------|--|
| 2 | commitment unless the baseload electricity acquired under the commitment is |
| 3 | produced by a generating facility that complies with the 1,100 pounds per megawatt- |
| 4 | hour requirement.7 A "long-term financial commitment" is an investment in or |
| 5 | upgrade of a generating facility that produces baseload electricity, or a contract with a |
| 6 | term of more than five years, beginning on the date on which the contract is executed, |
| 7 | that includes acquisition of baseload electricity. ⁸ The term "long-term financial |
| 8 | commitment," however, excludes: |
| 9 | (A) Routine or necessary maintenance; |
| 10 | (B) Installation of emission control equipment; |
| 11 12 13 | (C) Installation, replacement or modification of equipment that improves the heat rate of the facility or reduces a generating facility's pounds of GHGs per megawatt-hour of electricity; |
| 14 15 16 17 18 19 | (D) Installation, replacement or modification of equipment where the primary purpose is to maintain reliable generation output capability and not to extend the life of the generating facility, and that does not increase the heat input or fuel usage as specified in existing generation air quality permits, but that may result in incidental increases in generation capacity; |
| 20 21 | (E) Repairs necessitated by sudden and unexpected equipment failure; or |
| 22 | (F) An acquisition of additional interest. ⁹ |
| 23 | Additionally, an "upgrade" is defined as any modification made for the primary |
| 24 | purpose of increasing the electric generation capacity of a baseload facility. ¹⁰ |
| 1 | |

 ⁶ ORS 757.524 (<u>https://www.oregonlaws.org/ors/757.524</u>).
 ⁷ ORS 757.531(1)(a) (<u>https://www.oregonlaws.org/ors/757.531</u>).
 ⁸ ORS 757.522(10)(a) (<u>https://www.oregonlaws.org/ors/757.522</u>).
 ⁹ ORS 757.522(10)(b) (<u>https://www.oregonlaws.org/ors/757.522</u>).
 ¹⁰ ORS 757.522(13) (<u>https://www.oregonlaws.org/ors/757.522</u>).

| 1 | Q. | Did all of the projects identified in the list of capital expenditures referenced by |
|----|----|--|
| 2 | | Mr. Woodruff and Dr. Fisher comply with the Oregon EPS? |
| 3 | A. | Yes. The list of capital expenditures referenced in Mr. Woodruff's ¹¹ and |
| 4 | | Dr. Fisher's ¹² testimonies all comply with the Oregon EPS, as each of the identified |
| 5 | | investments are specifically excluded from the definition of a "long-term financial |
| 6 | | commitment" under ORS 757.522(10)(b). |
| 7 | Q. | What were the investments identified by Mr. Woodruff and Dr. Fisher? |
| 8 | A. | Confidential Exhibit PAC/1402-I provides a listing of the investments and a brief |
| 9 | | summary of the rationale for each investment. Most of the projects, 15 of the 19 |
| 10 | | identified, related to the installation of environmental equipment and associated |
| 11 | | routine maintenance, allowed under ORS 757.522(10)(b)(A) and (B). The remaining |
| 12 | | four projects were turbine upgrades. These projects retrofit the turbines in Jim |
| 13 | | Bridger Unit 2, Hunter Units 1 and 3, and Huntington Unit 1 with "Dense Pack" |
| 14 | | design technology to improve efficiency to increase electrical generation capability |
| 15 | | without additional boiler heat input, steam flow, or emissions. The primary purpose |
| 16 | | of these projects was to make the units more efficient and reduce emissions, not to |
| 17 | | extend the life of the generating facility, and were allowed under Oregon's EPS. ¹³ |
| 18 | Q. | Did installation of the selective catalytic reduction system at Jim Bridger Units 3 |

 ¹¹ Prepared Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network (Woodruff Direct), p. 12, lines 19–24; and Woodruff Direct, Attachment E.
 ¹² Sierra Club Direct Testimony of Jeremy Fisher (Fisher Direct), p. 10, lines 10–14; and Sierra Club

Exhibit JIF-2. ¹³ ORS 757.522(10)(b)(C) and (D) (<u>https://www.oregonlaws.org/ors/757.522</u>).

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and 4 extend the lives of those two generation units?

2 A. No. Installation of selective catalytic reduction system at Jim Bridger Units 3 and 4 3 did not extend the lives of those units. Contrary to the unsupported assertion of Mr. Woodruff,¹⁴ compliance with environmental regulations does not extend the life of a 4 5 unit, it simply allows the units to continue operating through the units' useful lives. 6 The installation of the selective catalytic reduction systems in 2015 and 2016 on Jim 7 Bridger Units 3 and 4 were made to comply with the Wyoming Regional Haze state implementation plan and were reviewed and approved by the U.S. Environmental 8 Protection Agency.¹⁵ The cost effectiveness of the selective catalytic reduction 9 10 systems analysis assumed a 20-year asset life,¹⁶ consistent with U.S. Environmental 11 Protection Agency's Air Pollution Control Cost Manual. Accordingly, these 12 investments were assessed within the assumed remaining asset life for both Jim Bridger Unit 3 (2037) and Unit 4 (2037).¹⁷ 13

¹⁷ See PacifiCorp's 2015 IRP, Table 5.3 p. 63

¹⁴ Woodruff Direct p. 12, lines 26–27.

¹⁵ Federal Register / Vol. 79, No. 20 / Thursday, January 30, 2014 / Rules and Regulations https://www.gpo.gov/fdsys/pkg/FR-2014-01-30/pdf/2014-00930.pdf.

¹⁶ EPA Air Pollution Control Costs Manual, Sixth Edition, EPA/452/B-02-001, January 2002, https://www3.epa.gov/ttncatc1/dir1/c_allchs.pdf.

⁽http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2 015IRP/PacifiCorp_2015IRP-Vol1-MainDocument.pdf).

Q. Did any of the projects referenced by Mr. Woodruff or Dr. Fisher, and listed on
 Confidential Exhibit PAC/1402-I, extend the lives of the respective generation
 plant units?

4 A. No. None of the projects changed the established lives of the respective units.

5 Q. What are PacifiCorp's EPS requirements in Washington?

6 A. In Washington, RCW 80.80.040 requires that all baseload electric generation long-7 term financial commitments meet the average available GHG emissions output determined by the Washington Department of Commerce, which is currently 970 8 pounds of GHGs per megawatt-hour for a generating facility.¹⁸ A "long-term 9 10 financial commitment" means either a new ownership interest in baseload electric 11 generation or an upgrade to a baseload electric generation facility, or a new or renewed contract for baseload electric generation with a term of five or more years.¹⁹ 12 13 An upgrade is defined as any modification made for the primary purpose of 14 increasing generation capacity, but does not include: routine or necessary 15 maintenance; installation of emission control equipment; installation, replacement, or 16 modification of equipment that improves the heat rate of the facility; or installation, replacement, or modification of equipment for the primary purpose of maintaining 17 18 reliable generation output capability that does not increase the heat input or fuel usage.²⁰ These are essentially the same requirements as in Oregon. 19

¹⁸ RCW 80.80.040(1) (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.040</u>); RCW 80.80.050 (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.050</u>); and Washington Administrative Code (WAC) 194-26-020 (<u>http://apps.leg.wa.gov/WAC/default.aspx?cite=194-26-020</u>).

¹⁹ RCW 80.80.010(16) (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.010</u>).

²⁰ RCW 80.80.010(20) (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.010</u>).

| 1 | Q. | Has PacifiCorp met the Washington EPS requirements? |
|----|----|--|
| 2 | A. | Yes. PacifiCorp's investments have PacifiCorp has met the requirements of the |
| 3 | | Washington EPS, for the same reasons as PacifiCorp's compliance with the Oregon |
| 4 | | EPS. |
| 5 | Q. | Do other state commissions also review PacifiCorp's resource plans in relation to |
| 6 | | GHG emissions? |
| 7 | A. | Yes. For example, the Public Utility Commission of Oregon requires PacifiCorp to |
| 8 | | include in its Integrated Resource Planning (IRP) filings the potential regulatory |
| 9 | | compliance costs for carbon dioxide (CO2), nitrous oxides, sulfur oxides, and mercury |
| 10 | | emissions. ²¹ In D.07-01-039, the Commission found that the IRP process qualified as |
| 11 | | "review" for the purposes of the SB 1368 alternative compliance provision because |
| 12 | | the Public Utility Commission of Oregon requires that PacifiCorp report the expected |
| 13 | | regulatory compliance costs associated with an array of GHGs, including CO ₂ , within |
| 14 | | the IRP process. ²² |
| 15 | Q. | Does PacifiCorp still include regulatory compliance costs associated with GHGs |
| 16 | | in its IRP process? |
| 17 | A. | Yes. PacifiCorp continues to include such regulatory compliance costs in its IRP. |
| 18 | | Additionally, ORS 757.536 ²³ prohibits the Public Utility Commission of Oregon from |

²¹ See In the matter of Public Utility Commission of Oregon Investigation into Integrated Resource Planning, Order No. 07-002 (January 8, 2007) (Integrated Resource Planning Guideline 8: Environmental Costs – "Utilities should include, in their base-case analyses, the regulatory compliance costs they expect for carbon dioxide (CO₂), nitrogen oxides, sulfur oxides, and mercury emissions. Utilities should analyze the range of potential CO₂ regulatory costs in Order No. 93-695, from zero to \$40 (1990\$). In addition, utilities should perform sensitivity analysis on a range of reasonably possible cost adders for nitrogen oxides, sulfur oxides, and mercury, if applicable.") ²² D.07-01-039 at p. 168.

²³ <u>https://www.oregonlaws.org/ors/757.536.</u>

| 1 | | 1 5 |
|----|----|--|
| 1 | | acknowledging an integrated resource plan or allowing in customer rates any costs of |
| 2 | | a long-term financial commitment by an electric utility unless the electricity acquired |
| 3 | | under the commitment meets Oregon's GHG emissions regulations. |
| 4 | Q. | Did PacifiCorp extend the depreciable lives of generation facilities post-2007, as |
| 5 | | stated in Mr. Woodruff's testimony? |
| 6 | A. | Yes. In 2007, PacifiCorp extended the depreciable lives of the company's coal-fired |
| 7 | | generation resources in most of its regulated states to alleviate rate pressures on |
| 8 | | PacifiCorp's regulated customers. |
| | | |
| 9 | Q. | Do depreciation lives determine the operational lives of PacifiCorp's generation |
| 10 | | facilities? |
| 11 | A. | No. Depreciation lives establish ratemaking treatment for individual facilities in |
| 12 | | PacifiCorp's regulated states and are used to inform resource planning, but they do |
| 13 | | not necessarily establish the operational lives of PacifiCorp's generation facilities. |
| 14 | | PacifiCorp regularly re-evaluates depreciable lives of its assets, and has requested that |
| 15 | | the Commission accelerate depreciation of PacifiCorp's coal-fired generation |
| 16 | | facilities in its recent Test Year 2019 General Rate Case filing to align the depreciable |
| 17 | | lives for the company's coal-fired generation resources in California rates with the |
| 18 | | depreciable lives of coal-fired generation resources in Oregon and Washington. ²⁴ |
| 19 | Q. | Please summarize your testimony. |

Rebuttal Testimony of Chad A. TeplyMary M. Wiencke

²⁴ In the Matter of the Application of PACIFICORP (U-901-E), an Oregon Company, for an Order Authorizing a General Rate Increase Effective January 1, 2019, Application (A.)18-04-002 (filed April 12, 2018).

| 10 | Q. | Does this conclude your rebuttal testimony? |
|----|----|---|
| 9 | | resource. |
| 8 | | financial commitments that have extended the life of any coal-fired generation |
| 7 | | assertions of Mr. Woodruff and Dr. Fisher, PacifiCorp has not made any long-term |
| 6 | | Commission's findings in D.07-01-039 have not changed, and contrary to the |
| 5 | | the EPS requirements in other states and applicable IRP guidelines. The basis for the |
| 4 | | PacifiCorp's alternative compliance in California is supported by its compliance with |
| 3 | | should leave PacifiCorp's alternative EPS compliance mechanism in place. |
| 2 | | requirements, as approved by the Commission in D.07-01-039. The Commission |
| 1 | A. | PacifiCorp continues to comply with California's EPS alternative compliance |

11 A. Yes.

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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

PACIFICORP

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December 2018

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| II. | COMPLIANCE WITH SB 1368 | 1 |

ATTACHED EXHIBITS

Exhibit PAC/1401-I - Alternate Emissions Performance Standard Compliance Filing February 1, 2018

Confidential Exhibit PAC/1402-I - Capital Investments in Environmental Equipment

| 1 | Q. | Are you the same Mary M. Wiencke who submitted direct testimony in this |
|----|----|---|
| 2 | | proceeding? |
| 3 | A. | Yes, I am. |
| 4 | | I. PURPOSE OF TESTIMONY |
| 5 | Q. | What is the purpose of your testimony? |
| 6 | A. | The purpose of my testimony is to provide clarification regarding PacifiCorp's |
| 7 | | alternative compliance mechanism with California's Emissions Performance Standard |
| 8 | | (EPS) under Senate Bill (SB) 1368 and California Public Utilities Commission |
| 9 | | (Commission) Decision (D.) 07-01-039. |
| 10 | | II. COMPLIANCE WITH SB 1368 |
| 11 | Q. | How has PacifiCorp complied with SB 1368? |
| 12 | A. | As I discuss in the portion of the testimony I share with Ms. Lockey (Exhibit |
| 13 | | PAC/1300-I), SB 1368 ¹ provided the Commission the discretion to approve an |
| 14 | | alternate compliance option for an electrical corporation that provides electric service |
| 15 | | to 75,000 or fewer retail end-use customers in California where: (A) a majority of the |
| 16 | | electrical corporation's end use customers for electric service are located outside of |
| 17 | | California; and (B) the emissions of greenhouse gasses (GHG) to generate electricity |
| 18 | | for the retail end-use customers of the electrical corporation are subject to a review by |
| 19 | | the utility regulatory commission of at least one other state in which the electrical |
| 20 | | corporation provides regulated retail electric service. ² In D.07-01-039, the |
| 21 | | Commission adopted PacifiCorp's proposed alternative compliance framework |
| 22 | | finding that a utility serving fewer than 75,000 customers in California meets the |

¹ Pub. Util. Code §§ 8340 and 8341. ² Pub. Util. Code § 8341(d)(9).

| 1 | | requirements of Public Utilities Code section 8341(d)(9) when any of the following |
|----------------------------------|-----------------|---|
| 2 | | occur: (1) a state jurisdiction in which PacifiCorp operates requires PacifiCorp to |
| 3 | | review and report on the potential impacts of different carbon policies within its IRP |
| 4 | | process; or (2) a state jurisdiction in which PacifiCorp operates requires PacifiCorp to |
| 5 | | disclose its GHG emissions or expected change in overall emissions as a result of |
| 6 | | changes to its portfolio, including new capacity additions; or (3) when a state |
| 7 | | jurisdiction in which PacifiCorp operates adopts rules specifically regulating |
| 8 | | emissions of GHGs from electricity generating facilities. ³ The Commission found |
| 9 | | that PacifiCorp met these requirements and required PacifiCorp to file an annual |
| 10 | | Advice Letter in February of each year, attesting to the fact that PacifiCorp continues |
| | | |
| 11 | | to meet the alternative compliance requirements of SB 1368.4 |
| 11 12 | Q. | to meet the alternative compliance requirements of SB 1368. ⁴ Does PacifiCorp still meet the alternative compliance requirements? |
| | Q. A. | |
| 12 | | Does PacifiCorp still meet the alternative compliance requirements? |
| 12 13 | | Does PacifiCorp still meet the alternative compliance requirements? Yes. PacifiCorp currently serves approximately 45,000 retail electric customers in |
| 12 13 14 | | Does PacifiCorp still meet the alternative compliance requirements? Yes. PacifiCorp currently serves approximately 45,000 retail electric customers in California, which represents less than 2 percent of PacifiCorp's total retail electric |
| 12 13 14 15 | | Does PacifiCorp still meet the alternative compliance requirements? Yes. PacifiCorp currently serves approximately 45,000 retail electric customers in California, which represents less than 2 percent of PacifiCorp's total retail electric load. PacifiCorp's GHG emissions continue to be subject to review by the regulated |
| 12 13 14 15 16 | | Does PacifiCorp still meet the alternative compliance requirements? Yes. PacifiCorp currently serves approximately 45,000 retail electric customers in California, which represents less than 2 percent of PacifiCorp's total retail electric load. PacifiCorp's GHG emissions continue to be subject to review by the regulated utility commissions in other states, principally Oregon and Washington. ⁵ Per the |
| 12 13 14 15 16 17 | | Does PacifiCorp still meet the alternative compliance requirements? Yes. PacifiCorp currently serves approximately 45,000 retail electric customers in California, which represents less than 2 percent of PacifiCorp's total retail electric load. PacifiCorp's GHG emissions continue to be subject to review by the regulated utility commissions in other states, principally Oregon and Washington. ⁵ Per the Commission's requirement, PacifiCorp has filed an annual Advice Letter in February |

³ D.07-01-039, pp. 165–166.
⁴ See Exhibit PAC/1100-I and Exhibit PAC/1401-I.
⁵ See Oregon Revised Statutes (ORS) 757.522 et al; Revised Code of Washington (RCW) 80.80.005 et al.

| 1 | | contained in Exhibit PAC/1100-I and Exhibit PAC/1401-I, along with the documents | |
|----------------------------------|----|--|--|
| 2 | | confirming the Commission's approval of each Advice Letter. | |
| 3 | Q. | What are PacifiCorp's EPS requirements in Oregon? | |
| 4 | A. | In Oregon, the GHG emissions standard applicable to electric companies and electric | |
| 5 | | service suppliers is 1,100 pounds of GHGs per megawatt-hour for a generating | |
| 6 | | facility. ⁶ An electric company may not enter into a new long-term financial | |
| 7 | | commitment unless the baseload electricity acquired under the commitment is | |
| 8 | | produced by a generating facility that complies with the 1,100 pounds per megawatt- | |
| 9 | | hour requirement. ⁷ A "long-term financial commitment" is an investment in or | |
| 10 | | upgrade of a generating facility that produces baseload electricity, or a contract with a | |
| 11 | | term of more than five years, beginning on the date on which the contract is executed, | |
| 12 | | that includes acquisition of baseload electricity. ⁸ The term "long-term financial | |
| 13 | | commitment," however, excludes: | |
| 14 | | (A) Routine or necessary maintenance; | |
| 15 | | (B) Installation of emission control equipment; | |
| 16 17 18 | | (C) Installation, replacement or modification of equipment that improves the heat rate of the facility or reduces a generating facility's pounds of GHGs per megawatt-hour of electricity; | |
| 19 20 21 22 23 24 | | (D) Installation, replacement or modification of equipment where the primary purpose is to maintain reliable generation output capability and not to extend the life of the generating facility, and that does not increase the heat input or fuel usage as specified in existing generation air quality permits, but that may result in incidental increases in generation capacity; | |
| 25 | | (E) Repairs necessitated by sudden and unexpected equipment failure; | |

 ⁶ ORS 757.524 (<u>https://www.oregonlaws.org/ors/757.524</u>).
 ⁷ ORS 757.531(1)(a) (<u>https://www.oregonlaws.org/ors/757.531</u>).
 ⁸ ORS 757.522(10)(a) (<u>https://www.oregonlaws.org/ors/757.522</u>).

| 1 | | or |
|----------------------------|-----------------|---|
| 2 | | (F) An acquisition of additional interest. ⁹ |
| 3 | | Additionally, an "upgrade" is defined as any modification made for the primary |
| 4 | | purpose of increasing the electric generation capacity of a baseload facility. ¹⁰ |
| 5 | Q. | Did all of the projects identified in the list of capital expenditures referenced by |
| 6 | | Mr. Woodruff and Dr. Fisher comply with the Oregon EPS? |
| 7 | A. | Yes. The list of capital expenditures referenced in Mr. Woodruff's ¹¹ and |
| 8 | | Dr. Fisher's ¹² testimonies all comply with the Oregon EPS, as each of the identified |
| 9 | | investments are specifically excluded from the definition of a "long-term financial |
| 10 | | commitment" under ORS 757.522(10)(b). |
| | | |
| 11 | Q. | What were the investments identified by Mr. Woodruff and Dr. Fisher? |
| 11 12 | Q. A. | What were the investments identified by Mr. Woodruff and Dr. Fisher? Confidential Exhibit PAC/1402-I provides a listing of the investments and a brief |
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| 12 13 | | Confidential Exhibit PAC/1402-I provides a listing of the investments and a brief summary of the rationale for each investment. Most of the projects, 15 of the 19 |
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| 12 13 14 15 | | Confidential Exhibit PAC/1402-I provides a listing of the investments and a brief summary of the rationale for each investment. Most of the projects, 15 of the 19 identified, related to the installation of environmental equipment and associated routine maintenance, allowed under ORS 757.522(10)(b)(A) and (B). The remaining |
| 12 13 14 15 16 | | Confidential Exhibit PAC/1402-I provides a listing of the investments and a brief summary of the rationale for each investment. Most of the projects, 15 of the 19 identified, related to the installation of environmental equipment and associated routine maintenance, allowed under ORS 757.522(10)(b)(A) and (B). The remaining four projects were turbine upgrades. These projects retrofit the turbines in Jim |

⁹ ORS 757.522(10)(b) (https://www.oregonlaws.org/ors/757.522).
¹⁰ ORS 757.522(13) (https://www.oregonlaws.org/ors/757.522).
¹¹ Prepared Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network (Woodruff Direct), p. 12, lines 19–24; and Woodruff Direct, Attachment E.
¹² Sierra Club Direct Testimony of Jeremy Fisher (Fisher Direct), p. 10, lines 10–14; and Sierra Club Testimory 2 Exhibit JIF-2.

| 1 | | of these projects was to make the units more efficient and reduce emissions, not to |
|----|----|---|
| 2 | | extend the life of the generating facility, and were allowed under Oregon's EPS. ¹³ |
| 3 | Q. | Did installation of the selective catalytic reduction system at Jim Bridger Units 3 |
| 4 | | and 4 extend the lives of those two generation units? |
| 5 | A. | No. Installation of selective catalytic reduction system at Jim Bridger Units 3 and 4 |
| 6 | | did not extend the lives of those units. Contrary to the unsupported assertion of Mr. |
| 7 | | Woodruff, ¹⁴ compliance with environmental regulations does not extend the life of a |
| 8 | | unit, it simply allows the units to continue operating through the units' useful lives. |
| 9 | | The installation of the selective catalytic reduction systems in 2015 and 2016 on Jim |
| 10 | | Bridger Units 3 and 4 were made to comply with the Wyoming Regional Haze state |
| 11 | | implementation plan and were reviewed and approved by the U.S. Environmental |
| 12 | | Protection Agency. ¹⁵ The cost effectiveness of the selective catalytic reduction |
| 13 | | systems analysis assumed a 20-year asset life,16 consistent with U.S. Environmental |
| 14 | | Protection Agency's Air Pollution Control Cost Manual. Accordingly, these |
| 15 | | investments were assessed within the assumed remaining asset life for both Jim |
| 16 | | Bridger Unit 3 (2037) and Unit 4 (2037). ¹⁷ |
| | | |

 ¹³ ORS 757.522(10)(b)(C) and (D) (<u>https://www.oregonlaws.org/ors/757.522</u>).
 ¹⁴ Woodruff Direct p. 12, lines 26–27.

 ¹⁵ Federal Register / Vol. 79, No. 20 / Thursday, January 30, 2014 / Rules and Regulations <u>https://www.gpo.gov/fdsys/pkg/FR-2014-01-30/pdf/2014-00930.pdf.</u>
 ¹⁶ EPA Air Pollution Control Costs Manual, Sixth Edition, EPA/452/B-02-001, January 2002,

https://www3.epa.gov/ttncatc1/dir1/c_allchs.pdf. ¹⁷ See PacifiCorp's 2015 IRP, Table 5.3 p. 63

⁽http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2 015IRP/PacifiCorp_2015IRP-Vol1-MainDocument.pdf).

4 A. No. None of the projects changed the established lives of the respective units.

5 Q. What are PacifiCorp's EPS requirements in Washington?

6 A. In Washington, RCW 80.80.040 requires that all baseload electric generation long-7 term financial commitments meet the average available GHG emissions output determined by the Washington Department of Commerce, which is currently 970 8 pounds of GHGs per megawatt-hour for a generating facility.¹⁸ A "long-term 9 10 financial commitment" means either a new ownership interest in baseload electric 11 generation or an upgrade to a baseload electric generation facility, or a new or renewed contract for baseload electric generation with a term of five or more years.¹⁹ 12 13 An upgrade is defined as any modification made for the primary purpose of 14 increasing generation capacity, but does not include: routine or necessary 15 maintenance; installation of emission control equipment; installation, replacement, or 16 modification of equipment that improves the heat rate of the facility; or installation, replacement, or modification of equipment for the primary purpose of maintaining 17 18 reliable generation output capability that does not increase the heat input or fuel usage.²⁰ These are essentially the same requirements as in Oregon. 19

¹⁸ RCW 80.80.040(1) (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.040</u>); RCW 80.80.050 (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.050</u>); and Washington Administrative Code (WAC) 194-26-020 (<u>http://apps.leg.wa.gov/WAC/default.aspx?cite=194-26-020</u>).

¹⁹ RCW 80.80.010(16) (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.010</u>).

²⁰ RCW 80.80.010(20) (<u>http://app.leg.wa.gov/RCW/default.aspx?cite=80.80.010</u>).

| 1 | Q. | Has PacifiCorp met the Washington EPS requirements? | |
|----|----|---|--|
| 2 | A. | Yes. PacifiCorp has met the requirements of the Washington EPS, for the same | |
| 3 | | reasons as PacifiCorp's compliance with the Oregon EPS. | |
| 4 | Q. | Do other state commissions also review PacifiCorp's resource plans in relation to | |
| 5 | | GHG emissions? | |
| 6 | A. | Yes. For example, the Public Utility Commission of Oregon requires PacifiCorp to | |
| 7 | | include in its Integrated Resource Planning (IRP) filings the potential regulatory | |
| 8 | | compliance costs for carbon dioxide (CO2), nitrous oxides, sulfur oxides, and mercury | |
| 9 | | emissions. ²¹ In D.07-01-039, the Commission found that the IRP process qualified as | |
| 10 | | "review" for the purposes of the SB 1368 alternative compliance provision because | |
| 11 | | the Public Utility Commission of Oregon requires that PacifiCorp report the expected | |
| 12 | | regulatory compliance costs associated with an array of GHGs, including CO2, within | |
| 13 | | the IRP process. ²² | |
| 14 | Q. | Does PacifiCorp still include regulatory compliance costs associated with GHGs | |
| 15 | | in its IRP process? | |
| 16 | A. | Yes. PacifiCorp continues to include such regulatory compliance costs in its IRP. | |
| 17 | | Additionally, ORS 757.536 ²³ prohibits the Public Utility Commission of Oregon from | |
| 18 | | acknowledging an integrated resource plan or allowing in customer rates any costs of | |

²¹ See In the matter of Public Utility Commission of Oregon Investigation into Integrated Resource Planning, Order No. 07-002 (January 8, 2007) (Integrated Resource Planning Guideline 8: Environmental Costs – "Utilities should include, in their base-case analyses, the regulatory compliance costs they expect for carbon dioxide (CO₂), nitrogen oxides, sulfur oxides, and mercury emissions. Utilities should analyze the range of potential CO₂ regulatory costs in Order No. 93-695, from zero to \$40 (1990\$). In addition, utilities should perform sensitivity analysis on a range of reasonably possible cost adders for nitrogen oxides, sulfur oxides, and mercury, if applicable.") ²² D.07-01-039 at p. 168.

²³ <u>https://www.oregonlaws.org/ors/757.536.</u>

| 1 | | a long-term financial commitment by an electric utility unless the electricity acquired | |
|----|----|--|--|
| 2 | | under the commitment meets Oregon's GHG emissions regulations. | |
| 3 | Q. | Did PacifiCorp extend the depreciable lives of generation facilities post-2007, as | |
| 4 | | stated in Mr. Woodruff's testimony? | |
| 5 | A. | Yes. In 2007, PacifiCorp extended the depreciable lives of the company's coal-fired | |
| 6 | | generation resources in most of its regulated states to alleviate rate pressures on | |
| 7 | | PacifiCorp's regulated customers. | |
| 8 | Q. | Do depreciation lives determine the operational lives of PacifiCorp's generation | |
| 9 | | facilities? | |
| 10 | A. | No. Depreciation lives establish ratemaking treatment for individual facilities in | |
| 11 | | PacifiCorp's regulated states and are used to inform resource planning, but they do | |
| 12 | | not necessarily establish the operational lives of PacifiCorp's generation facilities. | |
| 13 | | PacifiCorp regularly re-evaluates depreciable lives of its assets, and has requested that | |
| 14 | | the Commission accelerate depreciation of PacifiCorp's coal-fired generation | |
| 15 | | facilities in its recent Test Year 2019 General Rate Case filing to align the depreciable | |
| 16 | | lives for the company's coal-fired generation resources in California rates with the | |
| 17 | | depreciable lives of coal-fired generation resources in Oregon and Washington. ²⁴ | |
| 18 | Q. | Please summarize your testimony. | |
| 19 | A. | PacifiCorp continues to comply with California's EPS alternative compliance | |
| 20 | | requirements, as approved by the Commission in D.07-01-039. The Commission | |
| 21 | | should leave PacifiCorp's alternative EPS compliance mechanism in place. | |

²⁴ In the Matter of the Application of PACIFICORP (U-901-E), an Oregon Company, for an Order Authorizing a General Rate Increase Effective January 1, 2019, Application (A.)18-04-002 (filed April 12, 2018).

| 7 | Q. | Does this conclude your rebuttal testimony? |
|---|----|---|
| 6 | | resource. |
| 5 | | financial commitments that have extended the life of any coal-fired generation |
| 4 | | assertions of Mr. Woodruff and Dr. Fisher, PacifiCorp has not made any long-term |
| 3 | | Commission's findings in D.07-01-039 have not changed, and contrary to the |
| 2 | | the EPS requirements in other states and applicable IRP guidelines. The basis for the |
| 1 | | PacifiCorp's alternative compliance in California is supported by its compliance with |

8 A. Yes.

Investigation No. 17-04-019 Exhibit PAC/1401-I Witness: Mary M. Wiencke

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

PACIFICORP

Exhibit Accompanying Rebuttal Testimony of

Mary M. Wiencke

Alternate Emissions Performance Standard Compliance Filing February 1, 2018

ERRATA

December 2018

Exhibit No. PAC/1401-I Page 1 of 6 Witness: Mary M. Wiencke





February 1, 2018

VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

California Public Utilities Commission Energy Division Tariff Unit, 4th Floor 505 Van Ness Avenue San Francisco, CA 94102 Email: <u>edtariffunit@cpuc.ca.gov</u>

Re: Advice Letter No. 559-E - PacifiCorp (U 901-E) Annual Attestation of Compliance with Senate Bill 1368 Alternative Compliance Requirements, Commission Decision 07-01-039

PURPOSE

Pursuant to California Public Utilities Commission (Commission) Decision (D.) 07-01-039, PacifiCorp, d/b/a Pacific Power (PacifiCorp or Company) submits Advice Letter No. 559-E attesting that PacifiCorp continues to meet the alternative compliance requirements of Senate Bill (SB) 1368.

BACKGROUND

Section 8341(d)(9) of Senate Bill 1368 creates an alternative compliance mechanism to the Emission Portfolio Standard (EPS) for electrical corporations that provide electric service to 75,000 or fewer retail customers in California, provided an electrical corporation demonstrates that: (A) a majority of the electrical corporation's retail end-use customers for electric service are located outside of California; and, (B) the emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service.

PacifiCorp satisfies subpart (A). PacifiCorp is a multi-jurisdictional utility serving 1.7 million customers in six western states including California, Idaho, Oregon, Utah, Washington, and Wyoming. PacifiCorp serves 45,000 customers in northern California. Therefore, a majority of PacifiCorp's customers are located outside of California.

In D.07-01-039, the Commission indicated that an electrical corporation would satisfy subpart (B) of SB 1368's alternative compliance provision when *any* of the following occur:

1) a state jurisdiction requires the utility to review and report on the potential impacts of different carbon policies within its Integrated Resource Planning process; or 2) when it requires the utility to disclose its greenhouse gas emissions or expected change in overall emissions as a result of changes to its portfolio,

California Public Utilities Commission February 1, 2018 Page 2

including new capacity additions; or 3) when a state jurisdiction adopts rules specifically regulating emissions of greenhouse gases from electricity generating facilities. *See* D.07-01-039 at 165-66.

In D.07-01-039, the Commission ultimately concluded that PacifiCorp met the alternative compliance requirements as described above. To demonstrate continued compliance with these provisions, the Commission required PacifiCorp, on February 1 of each year, to file an advice letter attesting to the fact that PacifiCorp continues to meet the alternative compliance requirements consistent with D.07-01-039. See D.07-01-039 at 166 and ordering paragraphs 49 and 50.

Accordingly, PacifiCorp hereby attests, as set forth in this advice letter and Attachment A, that PacifiCorp continues to meet the alternative compliance requirements consistent with D.07-01-039. Attachment A represents a signed copy of the attestation.

EFFECTIVE DATE

This advice letter is submitted as a Tier 1 filing. PacifiCorp requests that this advice letter become effective February 1, 2018, the date that this advice letter was filed.

PROTESTS

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile, or electronically, any of which must be received no later than February 21, 2017, which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division Attention: Tariff Unit, 4th Floor 505 Van Ness Avenue San Francisco, CA 94102 Facsimile: (415) 703-2200 E-mail: edtariffunit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above. The protest should also be sent via U.S. mail (and electronically, if possible) to PacifiCorp at the addresses shown below on the same date it is mailed or delivered to the Commission.

Cathie Allen Regulatory Affairs Manager PacifiCorp 825 NE Multnomah Street, Suite 2000 Portland, OR 97232 Telephone: (503) 813-5934 E-mail: <u>californiadockets@pacificorp.com</u> California Public Utilities Commission February 1, 2018 Page 3

> Matthew McVee Chief Regulatory Counsel PacifiCorp 825 NE Multnomah Street, Suite 2000 Portland, OR 97232 Telephone: (503) 813-5585 E-mail: <u>matthew.mcvee@pacificorp.com</u>

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

In addition, PacifiCorp respectfully requests that all data requests regarding this matter be addressed to:

| By email (preferred): | datarequest@pacificorp.com |
|-----------------------|---|
| By regular mail: | Data Request Response Center PacifiCorp 825 NE Multnomah Street, Suite 2000 Portland, OR 97232 |

NOTICE

In accordance with General Order 96-B, Section 4, a copy of this Advice Letter will be served electronically or via U.S. mail to parties shown on the GO 96-B service list and on the service list for R.06-04-009, a copy of which is attached. A request for change of address in the GO 96-B service list should be directed by electronic mail to <u>californiadockets@pacificorp.com</u>. Advice letter filings may also be accessed electronically at: <u>www.pacificpower.net/regulation</u>.

Please direct any informal questions to Cathie Allen, Regulatory Affairs Manager, at (503) 813-5934.

Sincerel Scott Bolton

Senior Vice President, External Affairs and Customer Solutions

Enclosures

cc: Eric Dupre, Energy Division R.06-04-009 Service List GO 96-B Service List

Exhibit No. PAC/1401-I Page 4 of 6 Witness: Mary M. Wiencke

Attachment A Officer Attestation

CERTIFICATION OF COMPLIANCE WITH SENATE BILL 1368 ALTERNATIVE COMPLIANCE REQUIREMENTS

- (1) I have reviewed, or have caused to be reviewed, this attestation of alternative compliance with the Greenhouse Gas Emissions Performance Standard submittal.
- (2) Based on my knowledge, information, or belief, this compliance submittal does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements true.
- (3) Based on my knowledge, information, or belief, this compliance submittal contains all of the information required to be provided by Commission orders, rules, and regulations.

Scott Bolton Senior Vice President, External Affairs and Customer Solutions PacifiCorp 825 N.E. Multnomah, Suite 2000 Portland, Oregon 97232 (503) 813-7202

Dated: February 1, 2018

PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298 Exhibit No. PAC/1401-I Page 6 of 6 Witness: Mary M. Wiencke EDMUND G. BROWN JR., *Governor*



February 15, 2018

Advice Letter 559-E

Cathie Allen Regulatory Manager PacifiCorp 825 NE Multnomah, Suite 2000 Portland, OR 97232

SUBJECT: Attestation of Compliance with Senate Bill 1368 Alternative Compliance Requirements Decision (D) 07-01-039

Dear Ms. Allen:

Advice Letter 559-E is effective as of March 1, 2018.

Sincerely,

Edward Randoph

Edward Randolph Director, Energy Division

Investigation No. 17-04-019 Exhibit PAC/1402-I Witness: Mary M. Wiencke

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

PACIFICORP

REDACTED

Exhibit Accompanying Rebuttal Testimony of

Mary M. Wiencke

Capital Investments in Environmental Equipment

ERRATA

December 2018

EXHIBIT PAC/1402-I IS CONFIDENTIAL IN ITS ENTIRETY AND HAS BEEN SUBMITTED UNDER SEAL