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July 23, 2018

VIA ELECTRONIC FILING

PUC Filing Center
Public Utility Commission of Oregon
PO Box 1088
Salem, OR 97308-1088

Re: UE 339– In the Matter PACIFICORP, dba PACIFIC POWER, 2019 Transition Adjustment Mechanism

Attention Filing Center:

Attached for filing in the above-captioned docket is an electronic copy of the Joint Testimony in Support of Partial Stipulation. This filing is being made concurrently with the Partial Stipulation of PacifiCorp, Staff, CUB, AWEC, and Calpine Solutions.

Please contact this office with any questions.

Very truly yours,

Wendy McIndoo

Wendy McIndoo
Office Manager

Attachment

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 339

In the Matter of

PACIFICORP, d/b/a PACIFIC POWER,

2019 Transition Adjustment Mechanism

STAFF-PACIFICORP-CUB-AWEC-CALPINE SOLUTIONS

JOINT TESTIMONY IN SUPPORT OF PARTIAL STIPULATION

WITNESSES: MICHAEL G. WILDING, SCOTT GIBBENS, BOB JENKS,
BRADLEY G. MULLINS, and KEVIN C. HIGGINS

July 23, 2018

NG PARTIES

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PURPOSE OF TESTIMONY

Q. Who is sponsoring this testimony?

A. This testimony is jointly sponsored by PacifiCorp, Staff of the Public Utility Commission of Oregon (Staff), the Oregon Citizens' Utility Board (CUB), the Alliance of Western Energy Consumers (AWEC), and Calpine Energy Solutions LLC (Calpine Solutions) (collectively, the Stipulating Parties).

Q. Please provide your names and qualifications.

A. Our names are Michael G. Wilding, Scott Gibbens, Bob Jenks, Bradley G. Mullins, and Kevin C. Higgins. The qualifications for Mr. Wilding, the sponsor for PacifiCorp, are set forth in PAC/100, Wilding/1. The qualification for Mr. Gibbens, the sponsor for Staff, are set forth in Exhibit Staff/101. The qualifications for Mr. Jenks, the sponsor for CUB, are set forth in Stipulating Parties/101. The qualifications for Mr. Mullins, the sponsor for AWEC, are set forth in Exhibit AWEC/101. The qualifications for Mr. Higgins, the sponsor for Calpine Solutions, are set forth in Calpine Solutions/100, Higgins/1-3.

Q. What is the purpose of this joint testimony?

A. This Joint Testimony describes and supports the Partial Stipulation filed in docket UE 339, which resolves all but one disputed issue in PacifiCorp's 2019 Transition Adjustment Mechanism (TAM).

Q. Has any party to docket UE 339 objected to the Partial Stipulation?

A. No. The Partial Stipulation is supported by all parties to docket UE 339.

BACKGROUND ON 2019 TAM

Q. Please describe how docket UE 339 began.

A. On March 30, 2018, PacifiCorp filed its 2019 TAM, which consisted of the direct testimony and exhibits of Michael G. Wilding, Dana M. Ralston, and Judith M. Ridenour.[1] PacifiCorp also filed revised tariff sheets for Schedule 201 to implement the 2019 TAM. As described in the company's direct filing, the TAM typically updates the rates set forth in Schedule 205. The initial filing here, however, did not include a billable rate adjustment for Schedule 205 and therefore the company did not file revised tariff sheets for Schedule 205.[2] The company filed the 2019 TAM on a stand-alone basis without a general rate case and proposed that new rates become effective on January 1, 2019.

Q. What is the purpose of the TAM?

A. The TAM Guidelines adopted in Order No. 09-274 identify the two-fold purpose of the TAM. First, the TAM is "an annual filing with the objective to update the forecast net power costs to account for changes in market conditions."[3] In approving annual power cost updates, the Commission has recognized that "it is important to update the forecast of power costs included in rates to account for new information, *e.g.*, on expected market prices for electricity and natural gas, and for new…purchase power contracts" and that "[i]f the forecast is not updated each year, then [the utility] will be exposed to more than normal business risk."[4]

[1] PAC/100, PAC/200, and PAC/300.
[2] *See* PAC/300, Ridenour/3.
[3] *See In the Matter of PacifiCorp, dba Pacific Power 2009 Transition Adjustment Mechanism*, Docket No. UE 199, Order No. 09-274, Appendix A at 9 (July 16, 2009).
[4] *In re Portland General Electric Company*, Docket No. UE 180, Order No. 07-015 at 8 (Jan. 12, 2007).

The Commission has emphasized that the goal of the TAM to "is to achieve an accurate forecast of PacifiCorp's [NPC] for the upcoming year." [5]

The second purpose of the TAM is "to correctly identify the proper amount for the transition adjustment," with the final NPC update timed "close to the direct access window to capture costs associated with direct access."[6]

The Commission's administrative rules state that the transition adjustment utilizing the ongoing valuation methodology calculates the difference between the company's cost-of-service rate and the market value of the energy previously used to serve direct access customers.[7] The two key inputs to this calculation are : (i) the market value of freed-up energy, which PacifiCorp calculates through GRID, and (ii) the generation cost-of-service rate.[8] The more current and accurate these inputs, the more precise the transition adjustment and the lower the risk of cost-shifting to cost-of-service customers or overpayment of transition charges by direct access customers.

Along with the forecast NPC, the company's initial filing in the 2019 TAM also includes test period forecasts for: (1) other revenues related to NPC; (2) incremental benefits and costs related to the company's participation in the energy imbalance market (EIM) with the California Independent System Operator

[5] *In the Matter of PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism*, Docket No. UE 307, Order No. 16-482 at 2-3 (Dec. 20, 2016) ("PacifiCorp's TAM is an annual filing in which PacifiCorp projects the amount of [NPC] to be reflected in customer rates for the following year, as well as to set transition charges for customers electing to move to direct access. The TAM effectively removes regulatory lag for the company because the forecasts are used to adjust rates. For that reason, the accuracy of the forecasts is of significant importance to setting fair just and reasonable rates. Our goal, therefore, is to achieve an accurate forecast of PacifiCorp's [NPC] for the upcoming year.").
[6] Order No. 09-274, Appendix A at 9.
[7] ORS 757.607(2); OAR 860-038-0005(67)-(69).
[8] OAR 860-038-0140.

Corporation (CAISO); and (3) renewable energy production tax credits (PTCs).

Q. What did the company include in its March 30, 2018 TAM filing (Initial Filing)?

A. PacifiCorp's Initial Filing reflects normalized, total-company NPC for the test period (the 12 months ending December 31, 2019) of approximately $1.502 billion. On an Oregon-allocated basis, NPC in the Initial Filing are approximately $386.9 million. This amount is approximately $21.6 million higher than the $365.3 million included in rates through the 2018 TAM (docket UE 323), and $16.9 million higher when adjusted for forecasted load loss, other revenues, and PTCs. The TAM Initial Filing reflects an overall average rate increase of approximately 1.3 percent.

Q. Did the company provide any corrections to the Initial Filing before parties filed opening testimony?

A. Yes. Consistent with the TAM Guidelines adopted in Order No. 09-274 and revised in Order Nos. 09-432 and 10-363,[9] on May 21, 2018, PacifiCorp filed a list of corrections. The total impact of the identified corrections is a decrease of approximately $647,000 to the filed Oregon-allocated NPC. PacifiCorp indicated that the identified corrections would be included in the TAM Reply Update.

Q. Did Staff and other parties conduct discovery on the company's 2019 TAM?

A. Yes. Staff, CUB, AWEC, and Calpine Solutions issued a total of six sets of data requests.

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[9] Order No. 09-274, App A at 10; *In the Matter of PacifiCorp's 2010 Transition Adjustment Mechanism*, Docket No. UE 207, Order No. 09-432 (Oct. 30, 2009); *In the Matter of PacifiCorp's 2011 Transition Adjustment Mechanism*, Docket No. UE 216, Order No. 10-363 (Sept. 16, 2010).

Q. Did the parties convene a technical workshop in this case before Staff and intervenors filed opening testimony?

A. Yes. The company held a technical workshop on May 25, 2018. Thereafter, on June 11, 2018, Staff, AWEC, and Calpine Solutions filed opening testimony. CUB filed a letter indicating that it did not intend to file opening testimony.

Q. Did Staff propose adjustments to the 2019 TAM?

A. Yes. Staff filed testimony from three witnesses that addressed 14 different issues.[10] Staff recommended adjustments related to the EIM net benefits, wind capacity factors used for company-owned resources, and depreciation expense related to the Bridger Coal Company (BCC).[11] Staff also recommended that the company include the variable costs and benefits of repowering certain wind projects in the 2019 TAM[12] and indicated that Staff was continuing to investigate several issues pending additional information from PacifiCorp.[13]

Q. Did AWEC propose adjustments to the 2019 TAM?

A. Yes. AWEC made six recommendations in its opening testimony, which relate to wind capacity factors for company-owned resources (including repowered resources), the PTC rate used for 2019, wheeling expenses, the company's Official Forward Price Curve (OFPC) and hedging practices, EIM costs, and the company's five-year direct access program.[14]

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[10] *See* Staff/100, Gibbens/2-3.
[11] Staff/100, Gibbens/3.
[12] Staff/100, Gibbens/6-11.
[13] *See*, *e.g.*, Staff/200, Kaufman/6-7 (requesting additional information related to coal plant economic cycling).
[14] AWEC/100, Mullins/2.

Q. Did Calpine Solutions propose any adjustments to the 2019 TAM?

A. Yes. Calpine Solutions recommended an adjustment to the treatment of fixed generation costs in the calculation of the consumer opt-out charge applicable to the company's five-year direct access program.[15]

Q. Did the parties hold settlement discussions after Staff and intervenors filed opening testimony?

A. Yes. On June 20, 2018, the Stipulating Parties convened a settlement conference. The Stipulating Parties held an additional telephonic settlement conference on June 27, 2018, and during that conference reached an all-party stipulation that resolved all but one issue in the 2019 TAM. The settlement establishes baseline 2019 NPC in rates, subject to resolution of the remaining unsettled issue, the Reply Update, and the Final Update.

KEY PROVISIONS OF THE PARTIAL STIPULATION

Overview of Partial Stipulation

Q. What is the Stipulating Parties' agreement on the company's 2019 NPC?

A. The Stipulating Parties agree that NPC forecast reflected in the company's Initial Filing, subject to the adjustments described below, is reasonable. The Partial Stipulation results in a decrease in the Initial Filing of approximately $11.8 million on an Oregon-allocated basis, for an Oregon-allocated TAM baseline (both NPC and PTCs) of $370 million, or $354 million when adjusted for loads and other revenues, as shown in Exhibit 1 to the Partial Stipulation. This results in an overall rate increase of 0.4 percent, as shown in Exhibit 2 to the Partial

[15] Calpine Solutions/100, Higgins/4-5.

Stipulation. A preliminary estimate of the impact of each adjustment is included as Exhibit 3 to the Partial Stipulation. The impacts of the individual adjustments, described below and set forth in Exhibit 3 to the Partial Stipulation, are based on one-off studies from the Initial Filing.

The Stipulating Parties further agree that PacifiCorp will file a Reply Update and Final Update to its 2019 TAM filing consistent with the TAM Guidelines, including the adjustments described below. The Stipulating Parties recognize that the estimated impact of each of the agreed-upon adjustments may change in the TAM updates.

Wind Repowering Benefits

Q. Please describe the company's proposal to repower its existing wind fleet.

A. PacifiCorp plans to upgrade or "repower" company-owned, installed wind capacity with longer blades and new technology to generate more energy in a wider range of wind conditions. The upgrades are expected to increase output of the wind facilities by roughly 26 percent on average, extend the operating life of the facilities, and allow the facilities to requalify for PTC benefits for an additional 10 years. To receive the full PTC benefits for customers, the repowered facilities must be commercially operational by the end of 2020. To meet the 2020 deadline, the company anticipates repowering most of its facilities by late 2019. Under the company's current schedule, only the Dunlap facility will not be repowered until 2020.

Q. Please describe how the Partial Stipulation addresses the costs and benefits of repowering.

A. The Stipulating Parties agree to include the NPC benefits, including PTC benefits, in the 2019 TAM. In order to facilitate the matching of costs and benefits of repowering in rates, the Stipulating Parties agree to a one-time modification of the filing requirements for the Renewable Adjustment Clause (RAC), as described below.

Q. What is the RAC?

A. The RAC is the automatic adjustment clause created in accordance with Section 13 of Senate Bill 838 to allow for the timely recovery of costs associated with renewable portfolio standard (RPS) compliance.[16] The RAC was adopted in 2007 through a stipulation agreed to by PacifiCorp, Portland General Electric Company, Staff, AWEC (at the time, the Industrial Customers of Northwest Utilities), and CUB.[17] PacifiCorp's RAC is set forth in Schedule 202.[18]

Q. What does the RAC stipulation require in terms of matching costs and benefits in rates?

A. The stipulation governing the RAC provides that "if the fixed costs of an eligible resource are not included in RAC charges, or otherwise included in rates, then the variable costs and cost offsets of the eligible resource likewise should not be

[16] *See In the Matter of the Public Utility Commission of Oregon Investigation of Automatic Adjustment Clause Pursuant to SB 838*, Docket No. UM 1330, Order No. 07-572 at 1 (Dec. 19, 2007).
[17] Order No. 07-572 at 2.
[18] Order No. 07-572, App. A at 20-21.

included in the annual power cost update filings or power cost adjustment mechanisms."[19]

PacifiCorp interprets this provision, as applied to the wind repowering project, to require a modification to the RAC stipulation because TAM rates effective January 1, 2019 will include the prorated NPC and PTC benefits of the repowering project,[20] while the RAC rates reflecting the fixed costs of repowering are not anticipated to be effective until July 1, 2019.[21]

Staff does not agree that a modification to the terms of the RAC is necessary, as it disagrees with the underlying premise that rates are not "matched," for ratemaking purposes, when power cost rates include an allocated NPC impact from plant coming into service later in the year, and recovered through a different ratemaking mechanism. In the present case, a prorated share of the annual NPC and PTC benefits are included in the 2019 TAM, and the RAC is anticipated to recover the RAC-eligible costs from ratepayers after each repowered project is in-service, beginning on July 1, 2019. Though there is a timing difference between January and July, PacifiCorp's annual revenue requirement for power costs and the RAC are matched in terms of costs and benefits.

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[19] Order No. 07-572 at 5.
[20] The prorated benefits will account for the fact that the individual wind projects that will be repowered in 2019 will not be completed on January 1, 2019. *See* AWEC/100, Mullins/8 (Table 2 describes estimated in-service date for each repowered project). For example, repowering the Seven Mile Hills project is expected to be completed on July 1, 2019. So, the 2019 TAM includes six months of NPC and PTC benefits associated with that project. Most of the other projects that will be repowered in 2019 will be completed later in the year and therefore the 2019 TAM rates will include a smaller prorated share of the NPC and PTC benefits reflective of the later in-service date for each individual wind repowering project.
[21] Consistent with the fact that different individual wind projects will be in-service at different time in 2019 (*see supra* n. 22), the RAC rates will also have staggered effective dates so that RAC rates will only reflect the costs of repowering once the individual repowered wind project is in-service.

In order to approve the stipulation in this case, PacifiCorp and Staff agree that the Commission does not need to explicitly determine whether the ratemaking treatment proposed would require modification of the RAC. Rather, PacifiCorp and Staff recommend the Commission adopt language in its order that states the provisions of the RAC stipulation are amended to the extent necessary to achieve the settlement reached in the 2019 TAM.

Q. What modification to the RAC for the repowering projects do the Stipulating Parties agree is required in this case?

A. PacifiCorp's RAC provides that "[t]he Company will file this schedule by April 1 of each year, as necessary, for proposed changes relating to new eligible resources and updating all charges already included on this schedule."[22] The Stipulating Parties agree that PacifiCorp will make its repowering RAC filing on or before January 2, 2019, in order facilitate the inclusion of both repowering costs and benefits in 2019 Oregon rates. The Stipulating Parties agree to recommend to the Commission and support the implementation of an expedited procedural schedule for the repowering RAC docket to allow the RAC rates to be effective by July 1, 2019. The July 1, 2019, rate effective date is contemporaneous with the expected in-service date for the first repowering project. This provision is intended to better ensure that the fixed costs of repowering are included in rates contemporaneous with the in-service date for each repowered resource so that both the fixed costs and NPC benefits of repowering are matched in 2019 rates. The Stipulating Parties' agree that rates recovered pursuant to the RAC will

[22] PacifiCorp Oregon Schedule 202.

include prudently incurred costs of resources, including associated transmission, that are eligible under Senate Bill 838 and in service as of the date of the proposed rate change, consistent with the language in PacifiCorp's Schedule 202.

The Stipulating Parties further agree that if any repowering project is disallowed in the RAC, then the NPC and PTC benefits included in the 2019 TAM will be adjusted accordingly so that the costs and benefits remain matched.

Q. What happens if the expected in-service dates for the repowering projects change?

A. The Stipulating Parties agree that if the expected in-service date for a RAC eligible project goes beyond July 1, 2019, they will not oppose a later rate-effective date.

Q. Have the Stipulating Parties reached any agreement on how the expedited RAC schedule should be structured?

A. The Stipulating Parties have no specific agreement on the RAC schedule. To ensure a fair process, however, the Stipulating Parties support a general schedule that will allow at least two weeks between key events, like testimony and briefing dates. So, for example, if Staff and intervenor testimony is due March 1, the company would have at least two weeks before its next round of testimony is due. This framework will ensure that every party has a reasonable opportunity to prepare responsive testimony and briefs, while still achieving the rate effective date agreed to in the Partial Stipulation.

Q. Why did the Stipulating Parties agree to this one-time modification of the RAC to account for repowering?

A. Modification of the RAC allows parties additional time to review PacifiCorp's RAC filing while accounting for the appropriate matching of the fixed and variable costs and benefits of repowering in rates and allows the NPC benefits to flow through to customers in 2019.

Q. What is the expected NPC impact of including repowering in the 2019 TAM?

A. The preliminary, approximate estimate of this adjustment is an Oregon-allocated NPC reduction of $7,702,186, which may be revised in the Reply Update and Final Update based on changes to the scope or expected in-service dates of the repowering projects.

PTC Rate Inflator

Q. Please describe the term of the Partial Stipulation related to an increase in the forecasted PTC rate.

A. PacifiCorp agrees to apply an inflation adjustment for one-tenth of a cent to the PTC rate used in the 2019 TAM, consistent with AWEC's proposed adjustment.[23] This adjustment results in a PTC rate of 2.5 cents/kWh for 2019 and decreases Oregon-allocated NPC by approximately $247,732.

[23] AWEC/100, Mullins/9-12.

Wind Capacity Factors

Q. Please describe the terms of the Partial Stipulation that related to the methodology used to determine the capacity factors used for wind resources owned by the company.

A. PacifiCorp agrees to forecast the net capacity factor for company-owned wind projects using a 50/50 blend of (1) the P50 production estimates determined when each wind project was initially developed and (2) the cumulative average methodology proposed by PacifiCorp in its Initial Filing.[24] This provision represents a reasonable compromise between PacifiCorp's proposal to use the cumulative average methodology and Staff's proposal to continue using the P50 forecast and AWEC's proposal to use a 75/25 blend of P50 estimates and historical data.[25]

Q. Does the Stipulating Parties' agreement on company-owned wind resources change previous Commission-ordered adjustments to capacity factors used for ratemaking purposes?

A. No. PacifiCorp will continue to adjust wind capacity factors to remove the effects of avian curtailments in accordance with Commission Order No. 16-482, and the adjustment to Glenrock to account for the effect from Rolling Hills in accordance with Order No. 08-548. The change in methodology in this TAM does not alter

[24] *See* PAC/100, Wilding/39. There was some confusion in the record regarding the amount of historical data PacifiCorp proposed using to determine the capacity factors. To be clear, the company's proposed annual capacity factor is calculated using a cumulative average methodology—meaning that the annual capacity factor is calculated as the average capacity factor over the entire life of the wind resource, which is between eight and 10 years for company-owned resources.
[25] Staff/100, Gibbens/12; AWEC/100, Mullins/6.

the impetus for these adjustments. As such the P50 and historic actuals will be adjusted so as to remove the curtailment effects.

Q. Have the Stipulating Parties reached an agreement on how to model net capacity factors in future TAMs?

A. No. The Stipulating Parties expressly agree that this 50/50 blending methodology is a one-time, non-precedential adjustment in the 2019 TAM. In future power cost filings, parties are free to propose different methodologies for forecasting wind plant net capacity factors. In addition, PacifiCorp will not oppose a party's request for a generic investigation, or PacifiCorp-specific investigation, into the forecasting methodology for wind plant net capacity factors.

Q. What is the NPC impact of this adjustment?

A. This adjustment decreases Oregon-allocated NPC by approximately $634,314.

Jim Bridger Long-Term Fuel Plan

Q. Please describe the Partial Stipulation provision related to the 2018 Jim Bridger Long-Term Fuel Plan (2018 Fuel Plan).

A. PacifiCorp agrees to work with the Stipulating Parties to develop an alternative analysis that evaluates the reasonableness of the company's fueling strategy for the Jim Bridger plant based on a January 1, 2030, useful life for the plant.

Q. What useful life did the company use in the 2018 Fuel Plan?

A. The 2018 Fuel Plan uses an assumed operating life of 2037 for the Jim Bridger plant, which is consistent with PacifiCorp's 2017 Integrated Resource Plan (IRP).

Q. Why has the company agreed to provide alternative analysis based on a 2030 useful life?

A. Staff requested the alternative analysis using the shorter useful life[26] based on a provision included in SB 1547 that states: "For purposes of evaluating the prudence of an investment decision regarding a coal-fired resource . . . the useful life of the coal-fired resource may not be considered to be any later than January 1, 2030, unless the commission determines otherwise."[27]

Q. Does the Partial Stipulation require the company to prepare an entirely new 2018 Fuel Plan based on the 2030 useful life?

A. No. The Stipulating Parties acknowledge that it is not necessary to create an entirely new fuel plan for incorporation in the 2019 TAM. Instead, the Partial Stipulation calls for alternative analysis sufficient to demonstrate whether the company's fueling strategy is prudent even if the life of the Jim Bridger plant is shortened to 2030.

Q. When will the company prepare its alternative analysis?

A. PacifiCorp will meet with the parties to reach consensus on the type of analysis required and based on those discussions establish a mutually agreeable timeline for developing the alternative analysis. To the extent that the alternative analysis modifies the 2018 Fuel Plan, that modification will be addressed in the 2020 TAM. The Stipulating Parties agree that the coal costs included in the 2019 TAM, based on the 2018 Fuel Plan, are reasonable and prudent and should be approved by the Commission. The Stipulating Parties further agree that the 2019

[26] Staff/200 Kaufman/10 lines 2-4.
[27] ORS 757.518(5).

rate impacts resulting from a 2030 end-of-life are minimal, given that the preferred plan has minimal capital investment beyond 2030.

Coal Plant Dispatch

Q. Please describe how the company revised its coal plant dispatch modeling in the 2019 TAM.

A. PacifiCorp proposes modeling economic shutdowns for coal plants that are majority-owned by the company, that are not participating in the EIM, and that are not under operational constraints that would preclude an economic shutdown. The cycling period (*i.e.*, when a coal unit could be shut down for economic reasons) will run from February 1 to May 31, which corresponds to the spring run-off period when loads are generally lower, weather is typically mild, market prices are lower, and solar imports from California are increasing.

Q. Did any party challenge the company's revised modeling?

A. Yes, in part. Although Staff acknowledged that the economic cycling in PacifiCorp's modeling is consistent with historical cycling,[28] Staff asked for additional information related to how the company established the parameters used to model coal plant economic cycling.[29]

Q. How does the Partial Stipulation resolve this issue?

A. The Stipulating Parties agree that they will not oppose PacifiCorp's proposed modeling to account for the economic cycling of coal plants in the 2019 TAM.

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[28] Staff/200, Kaufman/8.
[29] Staff/200, Kaufman/6-7.

BCC Depreciation Expense

Q. Please describe the Stipulating Parties' agreement related to BCC depreciation expense.

A. The Stipulating Parties agree that in future TAM filings, PacifiCorp will include information setting forth how and why BCC depreciation expense has changed from the levels set in the company's most recent general rate case. The Stipulating Parties agree that PacifiCorp will provide workpapers in future TAM filings to support the depreciable lives of BCC assets. The Stipulating Parties will continue to work together to determine the types of workpapers to be included with future TAM filings prior to the filing of the 2020 TAM in April 2019.

Q. Does this Partial Stipulation term respond directly to an issue identified by a party in this case?

A. Yes. Staff had recommended that depreciation costs associated with BCC plant added after PacifiCorp's last rate case be excluded from the cost of fuel from BCC.[30]

Q. Is there precedent for the Partial Stipulation's treatment of BCC depreciation expense?

A. Yes. The Commission approved a substantively identical settlement provision in Idaho Power's 2018 annual power cost update case.[31]

[30] Staff/200, Kaufman/13.
[31] *In the Matter of Idaho Power Company's 2018 Annual Power Cost Update*, Docket No. UE 333, Order No. 18-170 at 5 (May 21, 2018) ("In future APCU filings, Idaho Power will include information setting forth how and why BCC depreciation expense has changed from the levels set the company's most recent general rate case. Idaho Power will provide workpapers in future APCU filings to support the depreciable lives of Bridger Coal Company assets. The parties will work together to determine the types of workpapers to be included in future APCU filings prior to the filing of the 2019 APUC in October 2018.").

Official Forward Price Curve

Q. Did the company change how it determined its OFPC used to set NPC in the 2019 TAM?

A. No. The company's methodology for determining its OFPC in this case was the same methodology approved by the Commission in the 2018 TAM.

Q. Did any party object to the OFPC in this case?

A. Yes. In its opening testimony, AWEC proposed an adjustment that would have decreased the OFPC.[32] AWEC also proposed a related adjustment to the allocation of costs and benefits of hedging transactions.

Q. Please describe the Stipulating Parties' agreement related to the OFPC.

A. The Stipulating Parties agree not to oppose the use of PacifiCorp's OFPC in the 2019 TAM and will not recommend any changes to the company's hedging policy or the allocation of hedging costs and benefits between customers and PacifiCorp in the 2019 TAM. This agreement resolves the OFPC and hedging issues raised by AWEC in its opening testimony.

Jim Bridger-to-Walla Walla Transmission Link

Q. Please describe the issue related to the Jim Bridger-to-Walla Walla transmission link.

A. When PacifiCorp assessed the customer benefits of the Energy Vision 2020 Project in the 2017 IRP, the modeling had no external EIM benefit calculation, like the one that has been used in the TAM. Therefore, the company included a virtual 300 MW transmission link between Jim Bridger and Walla Walla to

[32] AWEC/100, Mullins/14.

capture the incremental inter-regional EIM benefits that would be generated by the incremental wind resources from transmission-constrained areas of Wyoming once Idaho Power joined the EIM. AWEC recommended that the company's NPC modeling in this case include the virtual 300 MW transmission line.[33]

Q. How does the Partial Stipulation resolve this issue?

A. PacifiCorp agrees to an adjustment to decrease the Oregon-allocated NPC by approximately $141,911, which reflects the impact of modeling the 300 MW transmission link between the Jim Bridger plant and the Walla Walla area described in AWEC's testimony. To be clear, however, PacifiCorp is not actually changing its modeling in the 2019 TAM.

Q. Has the company agreed to include the 300 MW transmission link in future NPC modeling?

A. No. PacifiCorp does not agree to include this modeling change in future TAM filings and AWEC is not precluded from proposing this adjustment in future TAM filings.

Model Validation

Q. Has the company agreed to perform additional GRID model validation similar to the model validation performed before the 2019 TAM?

A. Yes. PacifiCorp agrees to perform an additional year of model validation using a 2017 base year and the methodology described in PacifiCorp's Initial Filing.[34]

[33] AWEC/100, Mullins/21-22.
[34] *See* PAC/100, Wilding/17-26.

EIM Costs and Benefits

Q. Please describe the Stipulating Parties' agreement related to the EIM benefits forecast for the 2019 TAM.

A. PacifiCorp agrees to update its forecasted EIM benefits using the same methodology as its Initial Filing,[35] based on all available data as proposed by Staff.[36] The updated EIM benefits will also account for the expiration of the West Valley tolling agreement, which will expire before 2019 and therefore not contribute to future EIM benefits. This adjustment decreases Oregon-allocated NPC by approximately $2.5 million.

Q. How does the Partial Stipulation address the EIM costs included in the 2019 TAM?

A. The Stipulating Parties agree that this issue is not covered by the Partial Stipulation. AWEC proposed an adjustment that removes the EIM costs from the TAM.[37] PacifiCorp and AWEC have not reached an agreement related to AWEC's adjustment. The amended procedural schedule adopted on July 6, 2018 reflects a schedule for resolution of the issue by the Commission.

Wheeling Costs

Q. Does the Partial Stipulation address AWEC's concerns over the accuracy of the company's wheeling costs?

A. Yes. To address AWEC's concerns, at the time of the Final Update, PacifiCorp agrees to provide the Stipulating Parties and the Commission with an attestation

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[35] *See* PAC/100, Wilding/40-45.
[36] Staff/100, Gibbens/17-18.
[37] *See* AWEC/100, Mullins/22-24.

that the wheeling expense included in the 2019 TAM is accurate and complete. At that time, PacifiCorp will also provide the Stipulating Parties information on its wheeling contracts and verify that there are no additional transmission rate cases that impact the wheeling expense included in the 2019 TAM.

Pioneer Wind Qualifying Facility (QF)

Q. Have the Stipulating Parties resolved Staff's concern over the accuracy of the historical data used to shape the wind forecast for the Pioneer Wind QF?[38]

A. Yes. The Stipulating Parties agree that the company's historical data is reasonable and do not oppose PacifiCorp's Pioneer Wind production estimate.

Refined Coal at Hunter Plant

Q. Please describe the refined coal issue at the Hunter Plant.

A. PacifiCorp has entered into a transaction with an energy technology systems company, Tinuum, which provides refined coal technology to enhance coal combustion and reduce mercury and nitrogen oxide emissions from coal-fired electricity generation plants. Pursuant to the transaction, Tinuum will install facilities on the Hunter property to produce refined coal for the Hunter plant.

On April 9, 2018, after the 2019 TAM was filed, the company requested Commission approval of the transaction and the Commission provided approval on May 24, 2018.[39]

[38] Staff/100, Gibbens/22-23.
[39] *In the Matter of PacifiCorp Application for Approval of Certain Agreements with Tinuum Group, LLC,* Docket No. UP 369, Order No. 18-193 (May 24, 2018).

Q. How does the Partial Stipulation address the refined coal at the Hunter Plant?

A. PacifiCorp agrees that the 2019 TAM will reflect NPC benefits of the refined coal used at the Hunter plant as a result of the transaction approved by the Commission in Order No. 18-193. This adjustment reduces Oregon-allocated NPC by approximately $895,517.

Five-Year Direct Access Program

Q. Please describe the provision in the Partial Stipulation related to the company's five-year direct access program.

A. Several parties provided testimony related to the company's long-term direct access program (*i.e.*, the five-year opt-out program) and indicated that they may recommend or support a generic investigation into PacifiCorp's program. To resolve this issue in this case, PacifiCorp agrees not to oppose a party's request for a generic investigation into the company's five-year direct access program. The Partial Stipulation does not bind any party to a particular position with respect to the five-year direct access program (except as described below) and the Stipulating Parties are free to take any position in the event a generic investigation is opened.

Consumer Opt-Out Charge

Q. Please describe how the Partial Stipulation resolves the dispute involving the calculation of the consumer opt-out charge.

A. The Stipulating Parties agree that the consumer opt-out charge applicable to PacifiCorp's five-year direct access program in the 2019 TAM will be calculated with no change to the fixed generation costs in years six through 10.

Q. Is the methodology agreed to in this case binding on future TAMs?

A. No. The Stipulating Parties expressly agree that this is a one-time, non-precedential adjustment in the 2019 TAM, and no party has waived its right to propose changes to the calculation of the consumer opt-out charge in future proceedings.

In addition, the Stipulating Parties agree that the Partial Stipulation does not constitute a waiver of any parties' rights relative to the pending appeal of Order No. 15-394 from the 2016 TAM.[40]

Q. Does the agreement on the consumer opt-out charge impact the TAM rates?

A. No. This adjustment does not impact the TAM rates but it decreases the Consumer Opt-Out Charge collected from five-year direct access customers by the following amounts:

Schedule 30 Primary	$1.61/MWh
Schedule 30 Secondary	$1.63/MWh
Schedule 47/48 Primary	$1.53/MWh
Schedule 47/48 Secondary	$1.63/MWh
Schedule 47/48 Transmission	$1.41/MWh

[40] Appellate Court No. A161359.

Renewable Energy Certificate (REC) Transfers

Q. Does the Partial Stipulation address PacifiCorp's proposal to transfer RECs to account for departing direct access load?

A. Yes. The Stipulating Parties recommend that the Commission approve the company's proposal in the 2019 TAM to transfer RECs from PacifiCorp to an electricity service supplier to account for the migration of direct access load using an approach developed by stakeholders in a Commission-authorized workshop.[41] The company's proposal was not challenged by any party in opening testimony.

General Terms

Q. If the Commission approves the Stipulation, will the company file revised tariff sheets?

A. Yes. The company will file revised tariff sheets for Schedules 201, 205 (if necessary), 294, and 295 as a compliance filing in docket UE 339. The revised tariff sheets will reflect the adjustments agreed upon in the Partial Stipulation and will reflect the TAM Final Update.

Q. What is the proposed effective date of the revised tariff sheets?

A. The revised tariff sheets will be effective January 1, 2019.

Q. If the Commission rejects any part of the Partial Stipulation, are the Stipulating Parties entitled to reconsider their participation in the Partial Stipulation?

A. Yes. The Stipulating Parties have negotiated the Partial Stipulation as an integrated document, and if the Commission rejects all or any material portion of

[41] PAC/100, Wilding/46-47.

the Partial Stipulation or imposes additional material conditions on the Partial Stipulation, any of the Stipulating Parties are entitled to withdraw from the Partial Stipulation.

Q. Are the agreements reflected in the Partial Stipulation binding on the parties in future TAMs or other proceedings?

A. No. The Stipulating Parties agree that by entering into the Partial Stipulation, no Stipulating Party approved, admitted, or consented to the facts, principles, methods, or theories employed by any other Stipulating Party in arriving at the terms of this Partial Stipulation, other than those specifically identified in the body of the Partial Stipulation. No Stipulating Party agreed that any provision of this Stipulation is appropriate for resolving issues in any other proceeding, except as specifically identified in the Partial Stipulation.

REASONABLENESS OF PARTIAL STIPULATION

Q. What is the basis for the Partial Stipulation?

A. The company's Initial Filing and the opening testimony filed by Staff, AWEC, and Calpine Solutions create an extensive record on the company's 2019 NPC. The company responded to multiple sets of data requests and provided updates and corrections to its Initial Filing. The Stipulating Parties met for a technical workshop and several settlement conferences and resolved their differences through dialogue and negotiations.

Q. Please explain why the Stipulating Parties believe that the Commission should adopt the Partial Stipulation.

A. The Partial Stipulation represents a reasonable compromise of the numerous and complex issues raised in this case for many reasons, including, but not limited to the fact that the Partial Stipulation:

- results in an average rate increase of approximately 0.4 percent, subject to later TAM updates;
- includes the NPC benefits of repowering in 2019 rates, while also allowing for the appropriate matching of benefits and costs;
- provides a reasonable compromise of the parties' positions on forecasts of wind generation capacity factors for company-owned resources;
- includes the NPC benefits of economic cycling of coal plants;
- provides for additional GRID model validation;
- updates EIM benefits using a methodology that reasonably accounts for historical growth rates;
- captures the benefits of refined coal at the Hunter plant; and
- resolves for 2019 the contentious issue surrounding the calculation of the consumer opt-out charge.

While the above list is not an exhaustive description of every term in the Partial Stipulation, the compromises on the remaining issues are reasonable.

Q. Have the Stipulating Parties evaluated the overall fairness of the Partial Stipulation?

A. Yes. Each Stipulating Party has reviewed the record in this case and the Partial Stipulation. The Stipulating Parties agree that the rates resulting from the Partial Stipulation meet the standard set forth in ORS 756.040 and represent a reasonable compromise of the issues presented in this case.

Q. What do the Stipulating Parties recommend regarding the Partial Stipulation?

A. The Stipulating Parties recommend that the Commission adopt the Partial Stipulation as the basis for resolving the issues in this case, and request that the Commission include the terms and conditions of the Partial Stipulation in its final orders in this case.

Q. Does this conclude your joint testimony?

A. Yes.

Stipulating Parties/101
Witnesses: Wilding, Gibbens, Jenks, Mullins, Higgins

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UE 339

STAFF-PACIFICORP-CUB-AWEC-CALPINE SOLUTIONS

Exhibit Accompanying Joint Testimony of Michael G. Wilding, Scott Gibbens, Bob Jenks, Bradley G. Mullins, And Kevin C. Higgins

Witness Qualifications

July 23, 2018

WITNESS QUALIFICATION STATEMENT

NAME: Bob Jenks

EMPLOYER: Oregon Citizens' Utility Board of Oregon

TITLE: Executive Director

ADDRESS: 610 SW Broadway, Suite 400
Portland, OR 97205

EDUCATION: Bachelor of Science, Economics
Willamette University, Salem, OR

EXPERIENCE: Provided testimony or comments in a variety of OPUC dockets, including UE 88, UE 92, UM 903, UM 918, UE 102, UP 168, UT 125, UT 141, UE 115, UE 116, UE 137, UE 139, UE 161, UE 165, UE 167, UE 170, UE 172, UE 173, UE 207, UE 208, UE 210, UE 233, UE 246, UE 283, UG 152, UM 995, UM 1050, UM 1071, UM 1147, UM 1121, UM 1206, UM 1209, UM 1355, UM 1635, UM 1633, and UM 1654. Participated in the development of a variety of Least Cost Plans and PUC Settlement Conferences. Provided testimony to Oregon Legislative Committees on consumer issues relating to energy and telecommunications. Lobbied the Oregon Congressional delegation on behalf of CUB and the National Association of State Utility Consumer Advocates.

Between 1982 and 1991, worked for the Oregon State Public Interest Research Group, the Massachusetts Public Interest Research Group, and the Fund for Public Interest Research on a variety of public policy issues.

MEMBERSHIP: National Association of State Utility Consumer Advocates
Board of Directors, OSPIRG Citizen Lobby
Telecommunications Policy Committee, Consumer Federation of America
Electricity Policy Committee, Consumer Federation of America
Board of Directors (Public Interest Representative), NEEA