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August 18, 2020

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-3398

Attn: Filing Center

RE: UE 375—Stipulation and Joint Testimony

PacifiCorp d/b/a Pacific Power encloses for filing in this docket the following documents:

- The Stipulation between PacifiCorp, Staff of the Public Utility Commission of Oregon, the Oregon Citizens' Utility Board, the Alliance of Western Energy Consumers, Sierra Club, Klamath Water Users Association, and Vitesse, LLC; and
- Joint Testimony in Support of the Stipulation.

If you have questions about this filing, please contact Cathie Allen, Regulatory Affairs Manager, at (503) 813-5934.

Sincerely,

Etta Lockey
Vice President, Regulation

Enclosures

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UE 375

In the Matter of
PACIFICORP, d/b/a PACIFIC POWER,
2021 Transition Adjustment Mechanism

STIPULATION

1 This Stipulation resolves all issues among all parties to the 2021 Transition
2 Adjustment Mechanism (TAM). The TAM is an annual filing by PacifiCorp, d/b/a Pacific
3 Power, to update its net power costs (NPC) in rates and set the transition adjustments for
4 direct access customers.

PARTIES

5
6 1. The parties to this Stipulation are PacifiCorp, Staff of the Public Utility
7 Commission of Oregon (Staff), the Oregon Citizens' Utility Board (CUB), the Alliance of
8 Western Energy Consumers (AWEC), Calpine Energy Solutions, LLC (Calpine
9 Solutions), Sierra Club, Klamath Water Users Association (KWUA), and Vitesse, LLC
10 (Vitesse) (collectively, the Parties).¹

BACKGROUND

11
12 2. On February 14, 2020, PacifiCorp filed its 2021 TAM, with direct
13 testimony and exhibits from David Webb, Ramon Mitchell, Dana Ralston, and Judith
14 Ridenour. PacifiCorp also filed revised tariff sheets for Schedule 201 and 205 to
15 implement the 2021 TAM. The company filed the 2021 TAM concurrently with its

¹ The Northwest and Intermountain Power Producers Coalition (NIPPC) has intervened in this docket as well, and they have indicated that they do not oppose the stipulation.

1 current general rate case (GRC)² and proposed that new rates become effective on January
2 1, 2021.

3 3. The TAM is PacifiCorp's annual filing to update its NPC in rates and to set
4 the transition adjustments for customers who choose direct access during the open
5 enrollment window in November. Along with the forecast NPC, the 2021 TAM also
6 includes test period forecasts for: (1) other revenues related to NPC; (2) incremental
7 benefits related to the company's participation in the energy imbalance market (EIM); and
8 (3) renewable energy production tax credits (PTC).

9 4. PacifiCorp's February 14, 2020 TAM filing (Initial Filing) reflected
10 normalized, total-company NPC for the test period (the 12 months ending December 31,
11 2021) of approximately \$1.401 billion. On an Oregon-allocated basis, NPC in the Initial
12 Filing were approximately \$356.6 million. This amount was approximately \$13.3 million
13 lower than the \$369.9 million included in rates through the 2020 TAM (docket UE 356),
14 and \$49.2 million lower when adjusted for forecasted load changes, other revenues, and
15 PTCs. The TAM Initial Filing reflected an overall average rate decrease of approximately
16 3.7 percent.

17 5. On February 19, 2020, CUB and AWEC filed to intervene in this
18 proceeding. On March 3, 2020, NIPPC filed a petition to intervene. On March 9, 2020,
19 Calpine Solutions filed a petition to intervene. On March 25, 2020, Vitesse filed a petition
20 to intervene. On April 6, 2020, Sierra Club filed a petition to intervene. On April 13,
21 2020 KWUA filed a petition to intervene. On February 27, 2020, Administrative Law
22 Judge Sarah Rowe held a prehearing conference and subsequently issued a Prehearing

² See Docket No. UE 374.

1 Conference Memorandum granting certain requested interventions and adopting a
2 procedural schedule.

3 6. On May 12, 2020, the Commission held a special public meeting
4 discussing issues related to PacifiCorp's thermal generation units.

5 7. On May 15, 2020, Staff, AWEC, CUB, Sierra Club, and Calpine Solutions
6 filed opening testimony.

7 8. On May 28, 2020, the Parties convened a settlement conference.

8 9. PacifiCorp filed Reply Testimony from David Webb, Seth Schwartz, Dana
9 Ralston, Doug Young, and Ramon Mitchell, along with updated NPC forecasts (June
10 Update) on June 9, 2020. The June Update reflected normalized, total-company NPC for
11 the test period (the 12 months ending December 31, 2021) of approximately
12 \$1.406 billion. On an Oregon-allocated basis, NPC in the June Update were
13 approximately \$358.4 million. This amount was approximately \$11.5 million lower than
14 the \$369.9 million included in rates through the 2020 TAM (docket UE 356), and
15 \$47.4 million lower when adjusted for forecasted load changes, other revenues, and
16 PTCs. The TAM June Update reflected an overall average rate decrease of approximately
17 3.6 percent.

18 10. The Parties held additional settlement conferences on June 18, 2020, and
19 July 2, 2020. During that final conference, the Parties reached an all-party settlement in
20 principle that resolved all the issues in the 2021 TAM. The settlement establishes baseline
21 2021 NPC in rates, subject to the Final Update. The terms of the settlement are captured
22 in this stipulation.

11. On July 7, 2020, PacifiCorp filed a Motion to Modify the Procedural Schedule based on the settlement agreement. The motion was granted on July 8, 2020.

AGREEMENT

12. Overall Agreement: The Parties agree to submit this Stipulation to the Commission and request that the Commission approve the Stipulation as presented. The Parties agree that the rate change resulting from the Stipulation results in rates that are fair, just, and reasonable, as required by ORS 756.040. The Stipulation results in a decrease to the June Update filing of approximately \$2.4 million on an Oregon-allocated basis, for an Oregon-allocated TAM baseline (including both NPC and PTCs) of \$291.4 million. This includes a black box adjustment to NPC as described in Paragraph 14 below. This results in a rate decrease of \$49.8 million from the 2020 TAM (UE 356), or 3.8 percent on an overall basis, as shown in Exhibit 2. This does not include the NPC and PTC impacts from the new wind and transmission projects, which may be reflected through separate tariff filings as discussed in Paragraph 18, below. A preliminary estimate of the impact of adjustments is included as Exhibit 3.³ The impacts of the individual adjustments, described below and set forth in Exhibit 3, are based on one-off studies from the June Update filing in the 2021 TAM.

13. TAM Adjustments and Updates: The Parties agree that the NPC forecast reflected in the company's June Update, subject to the adjustments described in this Stipulation, is reasonable. The Parties agree that PacifiCorp will file a Final Update to its 2021 TAM filing consistent with the TAM Guidelines, including the adjustments described in this Stipulation. The Parties recognize that the estimated impact of each of

³ Adjustments in ¶22, ¶24 and a partial adjustment from ¶19 below have been included in the June Update listed as Item A01, Item U02 and Item U04 in Exhibit 503 from the June Update filing.

1 the agreed-upon adjustments may change in the TAM updates, along with the NPC
2 baseline and overall rate change.

3 14. NPC Adjustment: The Parties agree to an Oregon-allocated unspecified
4 reduction to NPC of \$2.25 million.

5 15. Transition to AURORA for Modeling NPCs: As part of the transition from
6 the Generation and Regulation Initiative Decision Tool (GRID) production cost model to
7 the AURORA production cost model, PacifiCorp agrees to hold a workshop on this
8 transition before filing next year's NPC forecast mechanism⁴ and provide access to the
9 AURORA production cost model.

10 a. AURORA Workshop: In addition to information on the transition
11 from GRID to AURORA, the workshop will provide information on the Day-
12 Ahead/Real-Time Adjustment and how the benefits of nodal pricing would be
13 captured by AURORA prior to the filing of the power cost forecast mechanism.
14 PacifiCorp will provide all inputs, data, model settings, additional constraints, and
15 any other modeling changes that are identical to those included in the AURORA
16 model runs to be used for the Company's power cost forecast mechanism's initial
17 filing and workshop.

18 b. Access to AURORA: PacifiCorp agrees to providing an AURORA
19 license to Commission Staff and intervenors for the TAM. PacifiCorp will provide
20 all inputs, data, model settings, additional constraints, and any other modeling
21 changes that are identical to those included in the AURORA model runs used for

⁴ PacifiCorp has proposed a new power cost forecast mechanism in the current GRC, Docket No. UE 374. References to the NPC forecast mechanism in this Stipulation are intended to include any future TAM or other NPC forecast mechanism adopted by the Commission.

1 the Company's TAM application and workshop. The Parties agree that the costs
2 of this license, training, and data sets will be included for cost recovery in any
3 NPC forecast mechanism until the Company's next GRC. PacifiCorp would
4 additionally agree to conduct one AURORA model run per intervenor, so long as
5 the request is reasonable and PacifiCorp has a reasonable time to complete the
6 request during future NPC forecast mechanism proceedings.

7 16. Modeling of PacifiCorp's Coal Units: PacifiCorp agrees to remove the
8 "must run" constraint on the modeling of the Company's coal units, as part of the
9 transition to AURORA. PacifiCorp additionally agrees to perform a one-off informational
10 AURORA model run, based on the initial TAM filing, that uses an average coal price for
11 purposes of dispatching coal plants and removes any operational constraints related to the
12 minimum take provisions in the coal supply agreements. This one-off study will be
13 provided in the initial TAM filing as part of the 15-day workpapers until all coal costs are
14 removed from Oregon rates.⁵

15 17. Coal Supply Agreement Review: PacifiCorp agrees to provide testimony
16 in the initial TAM or other NPC forecast filing regarding the prudence of any Coal Supply
17 Agreements (CSA) that were entered into after its reply testimony of the previous year's
18 NPC forecast proceeding. PacifiCorp will notify Parties in the event of the execution of a
19 CSA following the Company's initial testimony but prior to conclusion of the NPC
20 forecast filing and work with Parties to identify the appropriate review timeline, regulatory
21 process and rate implementation.

⁵ PacifiCorp would not need to perform this model run after filing the NPC forecast for calendar year 2029.

1 18. New Wind Resources: The following PacifiCorp new wind resources
2 (New Wind Projects) are planned to be in service by December 31, 2020: TB Flats I, TB
3 Flats II, Cedar Springs II, Ekola Flats, Pryor Mountain and the repowering of Foote Creek.
4 If these wind resources are online on or before December 31, 2020, the full value of
5 ratemaking benefits will be included in TAM rates beginning January 1, 2021. If the
6 commercial in-service dates of one or more of the New Wind Projects are delayed beyond
7 December 31, 2020, the Parties agree that customers will retain the full value of
8 ratemaking benefits beginning with the commercial in-service date, but that Schedule 201
9 rates will be updated coincident with the timing of rate recovery of each New Wind
10 project, which is anticipated to be determined in docket UE 374. Parties agree to support
11 aligning the timing of the rate effective dates in docket UE 374 to match the commercial
12 in-service dates so long as the project comes online before July 1, 2021. In the event that
13 the cost recovery is approved earlier than the online date projected in the 2021 TAM, the
14 benefits forecasted in the 2021 TAM will be proportionately increased to reflect the early
15 online date. In the event that the cost recovery is delayed beyond the online date projected
16 in the 2021 TAM, but still comes online in 2021, the benefits forecasted from the 2021
17 TAM final update will be proportionately reduced to account for the delay.

18 In the event that the commercial in-service date for a project is delayed beyond
19 July 1, 2021, PacifiCorp will notify the Parties, and Parties will meet to discuss what
20 actions need to be taken.

21 19. EIM Benefits: The Parties agree that PacifiCorp's calculated EIM Inter-
22 regional transfer benefits for 2021, included in the Company's initial filing, are reasonable
23 and appropriate. PacifiCorp's forecast for EIM benefits will be updated consistent with

1 the other updates traditionally filed for the TAM. The Parties agree that the calculation of
2 EIM benefits is limited to the 2021 TAM and does not set a precedent for the
3 methodology to be used going forward. Additionally, PacifiCorp agrees to increase EIM
4 benefits (as filed in the initial filing) by \$214,555 on a Oregon-allocated basis as described
5 below:

6 a. PacifiCorp agrees to an unspecified increase of \$213,429 to EIM
7 benefits. Part of this increase, \$30,593, has been included in the June Update.

8 b. PacifiCorp agrees to include the flex transfer benefit of \$1,126 in its
9 calculation of EIM benefits, which was also included in the June Update.

10 c. PacifiCorp agrees to provide additional information on the
11 California Independent System Operator's (CAISO) calculation of EIM benefits,
12 including making the additional supporting documentation that is available to
13 PacifiCorp available for review.

14 20. Economic Cycling: PacifiCorp agrees to hold a quarterly call in 2021 with
15 Parties to provide information on the actual operations of Energy Supply Management
16 including the dispatch of its coal facilities and market conditions. PacifiCorp additionally
17 agrees to provide a study on the costs and benefits of economic cycling including the non-
18 fuel cost impacts by March 1, 2021.

19 21. Jim Bridger Selective Catalytic Reduction: PacifiCorp agrees to return its
20 power cost models to an adjusted minimum operating condition for Jim Bridger Unit 4 if
21 the Commission disallows full cost recovery for these capital additions.

22 22. Legacy Pension Costs at the Deer Creek Mine: Parties agree that an
23 adjustment to move legacy United Mine Workers of American pension costs associated

1 with the Deer Creek Mine from the TAM into base rates is appropriate. Parties agree to
2 support this adjustment in PacifiCorp's current GRC, docket UE 374.

3 23. Wheeling Revenues: The Parties agree that the inclusion of wheeling
4 revenues in the TAM and a subsequent change to TAM Guidelines (or APCA guidelines)
5 should be considered in the GRC, and PacifiCorp agrees to make any appropriate
6 adjustments to the 2021 TAM for wheeling revenues based on the Commission's final
7 order in the current GRC.⁶

8 24. Transmission Line Losses: PacifiCorp agrees to include transmission line
9 loss savings of 11.6 average megawatts in Wyoming East load bubble for the GRID model
10 in the 2021 TAM.

11 25. Wholesale Sales: In future power cost forecast proceedings, PacifiCorp
12 agrees to provide the Commission for the most recent past actual calendar year: for each
13 hour of the sales period: the \$/megawatt-hour (MWh) of bilateral trades total wholesale
14 sales revenue (\$); total energy delivered (MWh) through wholesales sales; hourly
15 generation logs for PacifiCorp owned generation; and monthly generation unit production
16 costs (\$/MWh). If the Company joins expanded markets in the future such as the
17 proposed CAISO Extended Day-Ahead Market, the Company agrees to work with
18 intervenors to identify additional wholesale sales data to be provided in future forecast
19 NPC filings.

20 26. Inclusion of long-term opt out charge under Schedule 296: Parties agree
21 that in in PacifiCorp's current GRC,⁷ they will support Calpine Solutions' proposal that
22 the TAM guidelines (or APCA guidelines, as applicable) be amended to provide a sample

⁶ *Id.*

⁷ *Id.*

1 calculation of Schedule 296 as applicable to customers currently served under rate
2 Schedules 30-Secondary and 48-Primary.⁸

3 27. Tariff Revisions: Upon approval of this Stipulation, concurrent with the
4 filing of the Final Update, PacifiCorp will file revised Schedules 201 and 205, Schedules
5 293 and 220 (if necessary), and revised transition adjustment Schedules 294, 295, and 296
6 as a compliance filing in docket UE 375, to be effective January 1, 2021, reflecting the
7 agreements in this Stipulation and the results of the Final Update. PacifiCorp will then
8 file additional tariff revisions to incorporate the benefits, including NPC and PTC benefits,
9 for any delayed New Wind Resources as described in Paragraph 18 of this Stipulation.

10 28. Entire Agreement: The Parties agree that this agreement represents a
11 compromise among competing interests and a resolution of all contested issues in this
12 docket. Any adjustment to PacifiCorp's Initial Filing or Reply Update not incorporated
13 into this stipulation directly or by reference is resolved without an adjustment for the
14 purposes of this proceeding.

15 29. This Stipulation will be offered into the record of this proceeding as
16 evidence pursuant to OAR 860-001-0350(7). The Parties agree to support this Stipulation
17 throughout this proceeding and any appeal, provide witnesses to sponsor this Stipulation at
18 the hearing, and recommend that the Commission issue an order adopting the settlements
19 contained herein. The Parties also agree to cooperate in drafting and submitting joint
20 testimony or a brief in support of the Stipulation in accordance with OAR 860-001-
21 0350(7).

⁸ Calpine Solutions/100, Higgins/7-8.

1 30. If this Stipulation is challenged, the Parties agree that they will continue to
2 support the Commission's adoption of the terms of this Stipulation. The Parties agree to
3 cooperate in any hearing and put on such a case as they deem appropriate to respond fully
4 to the issues presented, which may include raising issues that are incorporated in the
5 settlements embodied in this Stipulation.

6 31. The Parties have negotiated this Stipulation as an integrated document. If
7 the Commission rejects all or any material part of this Stipulation or adds any material
8 condition to any final order that is not consistent with this Stipulation, each Party reserves
9 its right, pursuant to OAR 860-001-0350(9), to present evidence and argument on the
10 record in support of the Stipulation or to withdraw from the Stipulation. The Parties agree
11 that in the event the Commission rejects all or any material part of this Stipulation or adds
12 any material condition to any final order that is not consistent with this Stipulation, the
13 Parties will meet in good faith within fifteen days and discuss next steps. A Party may
14 withdraw from the Stipulation after this meeting by providing written notice to the
15 Commission and other Parties. Parties shall be entitled to seek rehearing or
16 reconsideration pursuant to OAR 860-001-0720 in any manner that is consistent with the
17 agreement embodied in this Stipulation.

18 32. By entering into this Stipulation, no Party shall be deemed to have
19 approved, admitted, or consented to the facts, principles, methods, or theories employed
20 by any other Party in arriving at the terms of this Stipulation, other than those specifically
21 identified in the body of this Stipulation. No Party shall be deemed to have agreed that
22 any provision of this Stipulation is appropriate for resolving issues in any other
23 proceeding, except as specifically identified in this Stipulation.

1 33. This Stipulation is not enforceable by any Party unless and until adopted by
2 the Commission in a final order. Each signatory to this Stipulation acknowledges that
3 they are signing this Stipulation in good faith and that they intend to abide by the terms of
4 this Stipulation unless and until the Stipulation is rejected or adopted only in part by the
5 Commission. The Parties agree that the Commission has exclusive jurisdiction to enforce
6 or modify the Stipulation.

7 34. This Stipulation may be executed in counterparts and each signed
8 counterpart shall constitute an original document.

STAFF

By: _____

Date: _____

PACIFICORP

By:  _____

Date: August 18, 2020 _____

**ALLIANCE OF WESTERN ENERGY
CONSUMERS**

By: _____

Date: _____

OREGON CITIZENS' UTILITY BOARD

By: _____

Date: _____

CALPINE ENERGY SOLUTIONS LLC

By: _____

Date: _____

**KLAMATH WATER USERS
ASSOCIATION**

By: _____

Date: _____

SIERRA CLUB

By: _____

Date: _____

VITESSE, LLC

By: _____

Date: _____

STAFF

By: /s/ Sommer Moser

Date: August 17, 2020

PACIFICORP

By: _____

Date: _____

**ALLIANCE OF WESTERN ENERGY
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PACIFICORP

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Date: _____

**ALLIANCE OF WESTERN ENERGY
CONSUMERS**

By: _____

Date: _____

OREGON CITIZENS' UTILITY BOARD

By:  _____

Date: 8/17/2020

CALPINE ENERGY SOLUTIONS LLC

By: _____

Date: _____

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Date: August 17, 2020

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Date: _____

CALPINE ENERGY SOLUTIONS LLC

By: _____

Date: _____

SIERRA CLUB

By: R. Minahan

Date: August 17, 2020

PACIFICORP

By: _____

Date: _____

OREGON CITIZENS' UTILITY BOARD

By: _____

Date: _____

KLAMATH WATER USERS ASSOCIATION

By: Paul J. S.

Date: 8-17-20

VITESSE, LLC

By: _____

Date: _____

STAFF

By: _____

Date: _____

PACIFICORP

By: _____

Date: _____

**ALLIANCE OF WESTERN ENERGY
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Date: _____

**KLAMATH WATER USERS
ASSOCIATION**

By: _____

Date: _____

SIERRA CLUB

By: _____

Date: _____

VITESSE, LLC

By:  _____

Date: 08/18/2020 _____

EXHIBIT 1

**PacifiCorp
CY 2021 TAM
Settlement Filing**

		Total Company					Oregon Allocated						
		UE-356 CY 2020 - Final Update	TAM CY 2021 - Initial Filing	TAM CY 2021 - Reply Filing	TAM CY 2021 - Settlement Filing		Factors CY 2020	Factors CY 2021	UE-356 CY 2020 - Final Update	TAM CY 2021 - Initial Filing	TAM CY 2021 - Reply Filing	TAM CY 2021 - Settlement Filing	
Line no	ACCT.												
1	Sales for Resale												
2	Existing Firm PPL	447	7,454,128	7,542,788	7,364,161	7,364,161	SG	26.456%	26.023%	1,972,052	1,962,832	1,916,348	1,916,348
3	Existing Firm UPL	447	-	-	-	-	SG	26.456%	26.023%	-	-	-	-
4	Post-Merger Firm	447	422,493,915	274,078,000	246,508,905	246,508,905	SG	26.456%	26.023%	111,774,336	71,322,311	64,148,107	64,148,107
5	Non-Firm	447	-	-	-	-	SE	25.314%	25.101%	-	-	-	-
6	Total Sales for Resale		429,948,043	281,620,789	253,873,066	253,873,066				113,746,388	73,285,143	66,064,455	66,064,455
7													
8	Purchased Power												
9	Existing Firm Demand PPL	555	11,573,498	2,848,086	2,847,480	2,847,480	SG	26.456%	26.023%	3,061,867	741,147	740,989	740,989
10	Existing Firm Demand UPL	555	3,793,812	2,484,823	2,484,823	2,484,823	SG	26.456%	26.023%	1,003,685	646,616	646,616	646,616
11	Existing Firm Energy	555	37,613,980	15,046,383	15,044,970	15,044,970	SE	25.314%	25.101%	9,521,753	3,776,866	3,776,511	3,776,511
12	Post-merger Firm	555	674,728,706	592,134,446	608,735,645	608,015,977	SG	26.456%	26.023%	178,505,181	154,088,971	158,409,040	158,221,764
13	Secondary Purchases	555	-	-	-	-	SE	25.314%	25.101%	-	-	-	-
14	Other Generation Expense	555	7,454,837	-	-	-	SG	26.456%	26.023%	1,972,240	-	-	-
15	Total Purchased Power		735,164,833	612,513,738	629,112,919	628,393,250				194,064,726	159,253,600	163,573,157	163,385,881
16													
17	Wheeling Expense												
18	Existing Firm PPL	565	22,079,714	21,615,814	21,615,814	21,615,814	SG	26.456%	26.023%	5,841,375	5,625,004	5,625,004	5,625,004
19	Existing Firm UPL	565	-	-	-	-	SG	26.456%	26.023%	-	-	-	-
20	Post-merger Firm	565	106,215,175	114,763,115	114,742,965	114,742,965	SG	26.456%	26.023%	28,100,122	29,864,384	29,859,140	29,859,140
21	Non-Firm	565	3,175,158	2,694,259	2,694,259	2,694,259	SE	25.314%	25.101%	803,772	676,299	676,299	676,299
22	Total Wheeling Expense		131,470,047	139,073,187	139,053,037	139,053,037				34,745,269	36,165,687	36,160,443	36,160,443
23													
24	Fuel Expense												
25	Fuel Consumed - Coal	501	655,082,891	612,737,366	576,061,622	576,061,622	SE	25.314%	25.101%	165,830,293	153,806,196	144,600,039	144,600,039
26	Fuel Consumed - Coal (Cholla)	501	36,986,850	-	-	-	SE	25.314%	25.101%	9,362,999	-	-	-
27	Fuel Consumed - Gas	501	7,690,635	6,894,972	6,196,453	6,196,453	SE	25.314%	25.101%	1,946,838	1,730,741	1,555,402	1,555,402
28	Natural Gas Consumed	547	297,308,679	303,050,501	301,951,689	301,951,689	SE	25.314%	25.101%	75,261,903	76,070,185	75,794,367	75,794,367
29	Simple Cycle Comb. Turbines	547	4,355,357	3,721,741	3,344,450	3,344,450	SE	25.314%	25.101%	1,102,532	934,212	839,507	839,507
30	Steam from Other Sources	503	4,676,489	4,519,705	4,508,022	4,508,022	SE	25.314%	25.101%	1,183,825	1,134,513	1,131,580	1,131,580
31	Total Fuel Expense		1,006,100,902	930,924,285	892,062,236	892,062,236				254,688,390	233,675,847	223,920,895	223,920,895
32													
33	TAM Settlement Adjustment**		(1,467,719)	-	-	(8,802,107)		As Settled		(388,297)	-	-	(2,250,000)
34													
35	Net Power Cost (Per GRID)		1,441,320,020	1,400,890,421	1,406,355,126	1,396,833,350				369,363,700	355,809,991	357,590,040	355,152,763
36													
37	Oregon Situs NPC Adustments		522,082	786,770	846,893	846,893	OR	100.000%	100.000%	522,082	786,770	846,893	846,893
38	Total NPC Net of Adjustments		1,441,842,102	1,401,677,191	1,407,202,019	1,397,680,244				369,885,782	356,596,762	358,436,933	355,999,656
39													
40	Non-NPC EIM Costs*		1,456,461	-	-	-	SG	26.456%	26.023%	385,319	-	-	-
41	Production Tax Credit (PTC)		(96,935,002)	(248,328,203)	(248,328,203)	(248,328,203)	SG	26.456%	26.023%	(25,644,974)	(64,621,536)	(64,621,536)	(64,621,536)
42	Total TAM Net of Adjustments		1,346,363,561	1,153,348,988	1,158,873,816	1,149,352,041				344,626,127	291,975,226	293,815,397	291,378,121
43													
44								Increase Absent Load Change		(52,650,901)	(50,810,730)	(53,248,006)	
45													
46								Oregon-allocated NPC (incl. PTC) Baseline in Rates from UE-356		\$344,626,127			
47								\$ Change due to load variance from UE-356 forecast		(3,440,369)			
48								2021 Recovery of NPC (incl. PTC) in Rates		\$341,185,758			
49	*EIM Benefits for the 2020 TAM are reflected in net power costs												
50	**TAM Settlement UE 356 - Agreed to decrease Oregon-allocated NPC by \$388,297. TAM Settlement UE 375 - Agreed to decrease Oregon-allocated NPC by \$2,250,000.							Increase Including Load Change		\$ (49,210,532)	\$ (47,370,361)	\$ (49,807,637)	

EXHIBIT 2

TAM Price Change

PACIFIC POWER
ESTIMATED EFFECT OF PROPOSED PRICE CHANGE
ON REVENUES FROM ELECTRIC SALES TO ULTIMATE CONSUMERS
DISTRIBUTED BY RATE SCHEDULES IN OREGON
FORECAST 12 MONTHS ENDED DECEMBER 31, 2021

Line No.	Description	Sch No.	Sch No.	No. of Cust	MWh	Present Revenues (\$000)			Proposed Revenues (\$000)			Change				Line No.
						Base Rates	Adders ¹	Net Rates	Base Rates	Adders ¹	Net Rates	Base Rates (\$000)	% ²	Net Rates (\$000)	% ²	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
								(6) + (7)			(9) + (10)	(9) - (6)	(12)/(6)	(11) - (8)	(14)/(8)	
Residential																
1	Residential	4	4	517,740	5,521,127	\$628,518	\$8,453	\$636,972	\$607,421	\$8,453	\$615,874	(\$21,097)	-3.4%	(\$21,097)	-3.3%	1
2	Total Residential			517,740	5,521,127	\$628,518	\$8,453	\$636,972	\$607,421	\$8,453	\$615,874	(\$21,097)	-3.4%	(\$21,097)	-3.3%	2
Commercial & Industrial																
3	Gen. Svc. < 31 kW	23	23	82,822	1,130,147	\$126,081	\$5,748	\$131,829	\$121,685	\$5,748	\$127,433	(\$4,396)	-3.5%	(\$4,396)	-3.3%	3
4	Gen. Svc. 31 - 200 kW	28	28	10,562	2,038,726	\$186,682	\$4,020	\$190,703	\$177,566	\$4,020	\$181,586	(\$9,116)	-4.9%	(\$9,116)	-4.8%	4
5	Gen. Svc. 201 - 999 kW	30	30	880	1,361,426	\$110,812	\$1,603	\$112,415	\$105,660	\$1,603	\$107,263	(\$5,152)	-4.7%	(\$5,152)	-4.6%	5
6	Large General Service >= 1,000 kW	48	48	195	3,079,837	\$213,804	(\$8,589)	\$205,215	\$205,413	(\$8,589)	\$196,824	(\$8,391)	-3.9%	(\$8,391)	-4.0%	6
7	Partial Req. Svc. >= 1,000 kW	47	47	6	41,898	\$5,249	(\$114)	\$5,135	\$5,148	(\$114)	\$5,034	(\$101)	-3.9%	(\$101)	-4.0%	7
8	Dist. Only Lg Gen Svc >= 1,000 kW	848	848	1	0	\$2,222	\$12	\$2,234	\$2,222	\$12	\$2,234	\$0	0.0%	\$0	0.0%	8
9	Agricultural Pumping Service	41	41	7,894	221,554	\$25,947	(\$1,115)	\$24,832	\$24,780	(\$1,115)	\$23,665	(\$1,167)	-4.5%	(\$1,167)	-4.7%	9
10	Total Commercial & Industrial			102,360	7,873,589	\$670,797	\$1,565	\$672,362	\$642,474	\$1,565	\$644,039	(\$28,323)	-4.2%	(\$28,323)	-4.2%	10
Lighting																
11	Outdoor Area Lighting Service	15	15	6,045	8,693	\$1,146	\$214	\$1,361	\$1,044	\$214	\$1,258	(\$102)	-8.9%	(\$102)	-7.5%	11
12	Street Lighting Service Comp. Owned	50,51,52	51	1,097	20,238	\$3,220	\$664	\$3,884	\$2,919	\$664	\$3,583	(\$301)	-9.4%	(\$301)	-7.8%	12
13	Street Lighting Service Cust. Owned	53	53	302	12,046	\$754	\$154	\$908	\$755	\$154	\$908	\$0	0.0%	\$0	0.0%	13
14	Recreational Field Lighting	54	54	105	1,457	\$121	\$24	\$145	\$112	\$24	\$136	(\$9)	-7.6%	(\$9)	-6.3%	14
15	Total Public Street Lighting			7,549	42,434	\$5,242	\$1,056	\$6,298	\$4,829	\$1,056	\$5,885	(\$412)	-7.9%	(\$412)	-6.6%	15
16	Total Sales to Ultimate Consumers			627,649	13,437,150	\$1,304,557	\$11,074	\$1,315,631	\$1,254,724	\$11,074	\$1,265,799	(\$49,832)	-3.8%	(\$49,832)	-3.8%	16
17	Employee Discount			1,036	13,933	(\$392)	(\$5)	(\$397)	(\$379)	(\$5)	(\$384)	\$14		\$14		17
18	AGA Revenue					\$2,993		\$2,993	\$2,993		\$2,993	\$0		\$0		18
19	COOC Amortization					\$1,727		\$1,727	\$1,727		\$1,727	\$0		\$0		19
20	Total Sales with AGA			627,649	13,437,150	\$1,308,885	\$11,069	\$1,319,954	\$1,259,066	\$11,069	\$1,270,135	(\$49,819)	-3.8%	(\$49,819)	-3.8%	20

¹ Excludes effects of the Low Income Bill Payment Assistance Charge (Sch. 91), BPA Credit (Sch. 98), Public Purpose Charge (Sch. 290) and Energy Conservation Charge (Sch. 297).

² Percentages shown for Schedules 48 and 47 reflect the combined rate change for both schedules

EXHIBIT 3

Oregon TAM 2021 (February 2020 Initial Filing)	NPC (\$) =	1,400,890,421
	\$/MWh =	23.14

Oregon TAM 2021 (June 2020 Update Filing)	NPC (\$) =	1,406,355,126
	\$/MWh =	23.27

	Impact (\$) Oregon Allocated Basis	NPC (\$) Total Company
Settlement Adjustment*		
S01 - Blackbox Settlement Adjustment	(2,250,000)	
S02 - EIM Benefits (part of this adjustment--Paragraph 19 in the Stipulation--has been included in the June Update)	(183,962)	
Total Changes =	(2,433,962)	(9,521,776)
Oregon TAM 2021 (June 2020 Filing with Settlement)	NPC (\$) =	1,396,833,350
	\$/MWh =	23.11

** The adjustments from Paragraph 22, Paragraph 24 and partial adjustment from Paragraph 19 in the Stipulation have been included in the June Update listed as Item A01, Item U02 and Item U04 in Exhibit 503 from the Update filing.*

Docket No. UE 375
Stipulating Parties/100
Witnesses: Webb, Gibbens,
Jenks, Higgins, Kaufman,
Burgess, Reed, Dickman

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

PACIFICORP

**Stipulating Parties' Joint Testimony of
David Webb, Scott Gibbens, Bob Jenks, Lance Kaufman, Kevin Higgins, Edward
Burgess, Lloyd C. Reed, and Brian Dickman**

August 2020

JOINT TESTIMONY OF STIPULATING PARTIES

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PURPOSE OF TESTIMONY

Q. Who is sponsoring this testimony?

A. This testimony is jointly sponsored by PacifiCorp (PacifiCorp or Company), Staff of the Public Utility Commission of Oregon (Staff), the Oregon Citizens' Utility Board (CUB), the Alliance of Western Energy Consumers (AWEC), Calpine Energy Solutions, LLC (Calpine Solutions), Sierra Club, Klamath Water Users Association (KWUA), and Vitesse, Inc. (Vitesse) (collectively, the Parties).

Q. Please provide your names and qualifications.

A. Our names are David Webb, Scott Gibbens, Bob Jenks, Lance Kaufman, Kevin Higgins, Edward Burgess, Lloyd C. Reed, and Brian Dickman. The qualifications for Mr. Webb, the sponsor for PacifiCorp, are set forth in PAC/100, Webb/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 CUB/101. The qualifications for Dr. Kaufman, the sponsor for AWEC, are set forth in Exhibit AWEC/200. The qualifications for Mr. Higgins, the sponsor for Calpine Solutions, are set forth in Exhibit Calpine Solutions/100, Higgins/1-3. The qualifications for Mr. Burgess, the sponsor for Sierra Club, are set forth in Exhibit Sierra Club/101. The qualifications for Mr. Reed, the sponsor for KWUA, are set forth in Exhibit KWUA/100. The qualifications for Mr. Dickman, the sponsor for Vitesse, are set forth in Exhibit Vitesse/100, Dickman/1.

1 **Q. What is the purpose of this joint testimony?**

2 A. This joint testimony describes and supports the Stipulation filed in docket UE 375,
3 which resolves all issues in PacifiCorp’s 2021 Transition Adjustment Mechanism
4 (TAM).

5 **Q. Has any party to docket UE 375 objected to the Stipulation?**

6 A. No. The Stipulation is supported by all parties to docket UE 375.

7 **BACKGROUND ON 2021 TAM**

8 **Q. Please describe how docket UE 375 began.**

9 A. On February 14, 2020, PacifiCorp filed its 2021 TAM, which consisted of the direct
10 testimony and exhibits of David Webb, Ramon Mitchell, Dana Ralston, and Judith
11 Ridenour.¹ PacifiCorp also filed revised tariff sheets for Schedule 201 and 205 to
12 implement the 2021 TAM. The Company filed the 2021 TAM concurrently with a
13 general rate case (GRC) and proposed that new rates become effective on January 1,
14 2021.

15 **Q. What is the purpose of the TAM?**

16 A. The TAM Guidelines adopted in Order No. 09-274 identify the two-fold purpose of
17 the TAM. First, the TAM is “an annual filing with the objective to update the
18 forecast net power costs to account for changes in market conditions.”² In approving
19 annual power cost updates, the Commission has recognized that “it is important to
20 update the forecast of power costs included in rates to account for new information,
21 e.g., on expected market prices for electricity and natural gas, and for new...purchase

¹ PAC/100, PAC/200, and PAC/300.

² 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).

1 power contracts” and that “[i]f the forecast is not updated each year, then [the utility]
2 will be exposed to more than normal business risk.”³ The Commission has
3 emphasized that the goal of the TAM to “is to achieve an accurate forecast of
4 PacifiCorp’s [NPC] for the upcoming year.”⁴

5 The second purpose of the TAM is “to correctly identify the proper amount
6 for the transition adjustment,” with the final net power cost (NPC) update timed
7 “close to the direct access window to capture costs associated with direct access.”⁵

8 The Commission’s administrative rules state that the transition adjustment
9 utilizing the ongoing valuation methodology calculates the difference between the
10 Company’s cost-of-service rate and the market value of the energy previously used to
11 serve direct access customers.⁶ The two key inputs to this calculation are: (i) the
12 market value of freed-up energy, which PacifiCorp calculates through its Generation
13 and Regulation Initiative Decision Tools (GRID) model, and (ii) the generation cost-
14 of-service rate.⁷ The more current and accurate these inputs, the more precise the
15 transition adjustment and the lower the risk of cost-shifting to cost-of-service
16 customers or overpayment of transition charges by direct access customers.

17 Along with the forecast NPC, the Company’s initial filing in the 2021 TAM
18 also includes test period forecasts for: (1) other revenues related to NPC; (2)

³ *In re Portland General Electric Company*, Docket No. UE 180, Order No. 07-015 at 18 (Jan. 12, 2007).

⁴ *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.”).

⁵ Order No. 09-274, Appendix A at 9.

⁶ ORS 757.607(2); OAR 860-038-0005(67)-(69).

⁷ OAR 860-038-0140.

1 incremental benefits related to the Company's participation in the energy imbalance
2 market (EIM) with the California Independent System Operator Corporation
3 (CAISO); and (3) renewable energy production tax credits (PTC).

4 **Q. What did the Company include in its February 14, 2021 TAM filing (Initial**
5 **Filing)?**

6 A. PacifiCorp's Initial Filing reflected normalized, total-company NPC for the test
7 period (the 12 months ending December 31, 2021) of approximately \$1.401 billion.
8 On an Oregon-allocated basis, NPC in the Initial Filing were approximately
9 \$356.6 million. This amount was approximately \$13.3 million lower than the
10 \$369.9 million included in rates through the 2020 TAM (docket UE 356), and
11 \$49.2 million lower when adjusted for forecasted load changes, other revenues, and
12 PTCs. The TAM Initial Filing reflected an overall average rate decrease of
13 approximately 3.7 percent.

14 **Q. Did Staff and other parties conduct discovery on the Company's 2020 TAM?**

15 A. Yes. Staff, CUB, AWEC, Calpine Solutions, and Sierra Club issued a total of 21 sets
16 of data requests.

17 **Q. Did PacifiCorp present information to the Commissioners in a special public**
18 **meeting in this case before Staff and intervenors filed opening testimony?**

19 A. Yes. On May 12, 2020, the Commission held a special public meeting where
20 PacifiCorp presented information on their thermal generation units.

21 **Q. Did Staff propose adjustments or make other recommendations related to the**
22 **2021 TAM?**

23 A. Yes. Staff's testimony addressed five issues in the 2021 TAM. The first is a

recommended adjustment to account for the Company's new nodal pricing model dispatch savings.⁸ The second issue is in regard to the Company's modeling of economic shutdowns of coal plants, for which Staff recommended: the Company provide quarterly reports on its uneconomic coal plant operations, removal of the "must run" condition in GRID, removal of the four start-up limit on economic shutdowns, to have the Company engage with co-owners of coal plants regarding the potential for economic shutdowns, and to have the Company conduct a study into non-fuel costs and savings of economic shutdowns.⁹ The third issue concerned the Company's EIM benefit forecast, for which Staff recommended that the Commission reject the Company's calculation of EIM benefits for 2015 and 2016, reject the Company's calculation of actual greenhouse gas (GHG) benefits, increase the GHG benefit forecast by five percent plus inflation, update the integrated resource plan modeled flexible reserve benefit, and require the Company to request and maintain copies of the CAISO benefit calculations on a quarterly basis.¹⁰ The fourth issue was a recommendation to have the Company hold a workshop regarding the day-ahead/real-time (DA/RT) mechanism and the transition to AURORA for NPC forecasts.¹¹ The final issue was a recommended downward adjustment to the Company's Public Utility Regulatory Policies Act cost forecast.¹²

Q. Did AWEC propose adjustments to the 2021 TAM?

A. Yes. AWEC recommended the GRID model include a virtual 300 megawatt (MW)

⁸ Staff/100, Gibbens/8-10.

⁹ Staff/200, Enright/5-23.

¹⁰ Staff/200, Enright/27-49.

¹¹ Staff/200, Enright/52.

¹² Staff/400, Zarate/10-11.

transmission link between the Jim Bridger transmission area and the Walla Walla transmission area.¹³ Additionally, AWEC proposed including transmission line loss savings of 11.6 average MW (aMW) in the GRID model and incorporating 36.5 aMW of transfer capability due to improved transmission reliability.¹⁴ AWEC further proposed a reduction in NPC due to PacifiCorp's natural gas sales transaction activity¹⁵, a downward adjustment to PacifiCorp's NPC due to over-estimation of the DA/RT market cost¹⁶, and adjustments to costs related to the Bridger Coal Company.¹⁷ Finally, AWEC proposed modifications to the Direct Access opt-out program and related transition charge¹⁸, and disagreed with PacifiCorp's proposed changes to the TAM Guidelines within this proceeding.¹⁹ I am adopting, without modification, the testimony previously submitted on behalf of AWEC by Mr. Brad Mullins, which proposed these adjustments.

Q. Did CUB propose any adjustments to the 2021 TAM?

A. Yes. CUB raised several issues in its Opening Testimony in this proceeding. CUB proposed to change the TAM Guidelines to include wheeling revenues, which are currently forecast in the GRC and updated annually through a deferred accounting application.²⁰ CUB also proposed to remove legacy pension costs associated with the Deer Creek Mine from the TAM and move them into base rates, which will be

¹³ AWEC/100/Mullins/2.

¹⁴ AWEC/100/Mullins/2.

¹⁵ AWEC/100/Mullins/8-10.

¹⁶ AWEC/100/Mullins/10-14.

¹⁷ AWEC/100/Mullins/15-17.

¹⁸ AWEC/ 100/ Mullins/17-19.

¹⁹ AWEC/100/Mullins/20.

²⁰ CUB/100/Jenks/3.

1 determined in PacifiCorp's GRC, docket UE 374.²¹ CUB also proposed to adjust the
2 coal production forecast of PacifiCorp's Jim Bridger plant to remove the impact of
3 selective catalytic reduction (SCR) systems that have not demonstrated to be
4 prudent.²² CUB proposed to share the penalties associated with reduced coal burning
5 due to the conversion of PacifiCorp's Naughton 3 unit from coal to gas.²³ Finally,
6 CUB argued that PacifiCorp's methodology to calculate EIM benefits should not be
7 adopted.²⁴

8 **Q. Did Calpine Solutions propose any adjustments to the 2021 TAM?**

9 A. Calpine Solutions proposed that the TAM Guidelines be modified to include a sample
10 calculation of Schedule 296 as applicable to customers currently served under rate
11 schedules 30-Secondary and 48-Primary.²⁵ In the alternative, Calpine Solutions
12 recommended, if the Annual Power Cost Adjustment (APCA) proposed by
13 PacifiCorp in PacifiCorp's current general rate case (docket UE 374) is adopted, that
14 this provision be included in the APCA Guidelines.²⁶

15 **Q. Did Sierra Club propose any adjustments to the 2021 TAM?**

16 A. Yes. Sierra Club recommended an adjustment based on a number of factors. First,
17 Sierra Club presented testimony asserting that certain inputs included in the GRID
18 model used to calculate PacifiCorp's NPC lead to an excessive amount of coal
19 dispatch, thereby inflating the requested NPC. Specifically, Sierra Club's testimony
20 critiqued the "must run" and "minimum burn" constraints that, together, ensure that

²¹ CUB/100/Jenks/3.

²² CUB/100/Jenks/3.

²³ CUB/100/Jenks/3.

²⁴ CUB/100/Jenks/3.

²⁵ Calpine Solutions/100, Higgins/7-8.

²⁶ Id.

1 the Company's coal units operate a minimum number of hours, regardless of the
2 availability of other resources. Second, Sierra Club critiqued PacifiCorp's reliance on
3 incremental and supplemental costs, rather than actual costs, to model coal unit
4 dispatch. Sierra Club pointed out that the primary discrepancy between these costs at
5 some coal plants is attributed by PacifiCorp to the minimum tonnage provisions in
6 PacifiCorp's coal supply agreements. Sierra Club questioned whether these coal
7 contracts are in the best interests of PacifiCorp's customers. Third, Sierra Club
8 pointed out that some costs, such as minimum tonnage requirements in the
9 Company's coal contracts, are "fixed" costs that are inappropriate for recovery
10 through the TAM. Fourth, Sierra Club asserted that PacifiCorp's sales for resale are
11 often made at prices lower than the production costs at its coal plants, resulting in
12 TAM recovery "subsidizing" PacifiCorp's wholesale market transactions.

13 Based on these findings and conclusions, Sierra Club recommended that the
14 Commission: (1) correct for uneconomic generation at PacifiCorp's plants using coal
15 fuel not subject to minimum take obligations (or equivalent scenario) by removing
16 projected coal expenses at these plants from the NPC and replacing them with a
17 benchmark fuel cost; (2) disallow "fixed" fuel costs from being recovered through the
18 TAM if they are associated with contract provisions executed within the last three
19 years; (3) require that PacifiCorp update its modeling approach for estimating future
20 NPC by (a) when simulating dispatch decisions, use fuel costs that accurately reflect
21 the total production cost paid by PacifiCorp customers, (b) remove all "must run"
22 constraints at any coal plant for the entire model year, and (c) remove all "minimum
23 burn" constraints at any coal plant for the entire model year; (4) direct PacifiCorp to

1 include for review in the Integrated Resource Plan process any new, modified, or
2 updated coal supply agreements with minimum tonnage requirements; (5) direct
3 PacifiCorp to review its coal contracts with renegotiation provisions and provide the
4 Commission with a report analyzing whether such renegotiations would reduce
5 overall costs for Oregon ratepayers; and (6) provide guidance on PacifiCorp's
6 wholesale market practices, including direction that the Company report specified
7 information for each hour of the sales period.

8 **Q. Did KWUA propose any adjustments to the 2021 TAM?**

9 A. No.

10 **Q. Did Vitesse propose any adjustments to the 2021 TAM?**

11 A. No. Vitesse reviewed PacifiCorp's filing and the testimony of other parties but did
12 not file its own testimony or propose specific adjustments to the TAM. Vitesse also
13 participated in the TAM settlement conferences. Based on the review of parties'
14 testimony and participation in the settlement conferences, Vitesse recommends that
15 the Commission approve the Settlement as a reasonable compromise of all issues
16 raised in this case.

17 **Q. Did the Company file a TAM Reply Update?**

18 A. Yes, PacifiCorp filed a TAM Reply Update (June Update) on June 9, 2020. The June
19 Update reflected normalized, total-company NPC for the test period (the 12 months
20 ending December 31, 2021) of approximately \$1.406 billion. On an Oregon-allocated
21 basis, NPC in the June Update were approximately \$358.4 million. This amount was
22 approximately \$11.5 million lower than the \$369.9 million included in rates through
23 the 2020 TAM (docket UE 356), and \$47.4 million lower when adjusted for

1 forecasted load changes, other revenues, and PTCs. The June Update reflected an
2 overall average rate decrease of approximately 3.6 percent.

3 **Q. Did the Parties hold settlement discussions after Staff and intervenors filed**
4 **opening testimony?**

5 A. Yes. The Stipulating Parties held a settlement conference on June 18, 2020, and an
6 additional settlement conference on July 2, 2020. During that final conference, the
7 Stipulating Parties reached an all-party stipulation that resolved all the issues in the
8 2021 TAM. The settlement establishes baseline 2021 NPC in rates, subject to the
9 Final Update.

10 **KEY PROVISIONS OF THE STIPULATION**

11 **Overview of Stipulation**

12 **Q. What is the Stipulating Parties' agreement on the Company's 2021 NPC?**

13 A. The Stipulating Parties agree that the NPC forecast reflected in the Company's June
14 Update, subject to the adjustments described below, is reasonable. The Stipulation
15 results in a decrease to the June Update of approximately \$2.4 million on an Oregon-
16 allocated basis, for an Oregon-allocated TAM baseline (including both NPC and
17 PTCs) of \$291.4 million. This includes a black box adjustment to NPC as described
18 in Paragraph 14 of the Stipulation. This results in a rate decrease of \$49.8 million
19 from the 2020 TAM (docket UE 356), or 3.8 percent on an overall basis, as shown in
20 Exhibit 2 to the Stipulation. A preliminary estimate of the impact of each adjustment
21 is included as Exhibit 3, except that the adjustments in Paragraph 22, Paragraph 24
22 and a partial adjustment from Paragraph 19 of the Stipulation have been included in
23 the June Update listed as Item A01, Item U02 and Item U04 in Exhibit 503 from the

1 June Update filing. The impacts of the individual adjustments, described below and
2 set forth in Exhibit 3, are based on one-off studies from the June Update filing in
3 2021 TAM. The Stipulating Parties further agree that PacifiCorp will file a Final
4 Update to its 2021 TAM filing consistent with the TAM Guidelines, including the
5 adjustments described below.

6 **Transition to AURORA**

7 **Q. Please explain why PacifiCorp is transitioning away from the production cost**
8 **model known as GRID to the one known as AURORA.**

9 A. As described in the testimony of Michael G. Wilding in docket UM 1050, PacifiCorp
10 is working towards implementing the Nodal Pricing Model (NPM). As part of that
11 process, PacifiCorp is working with Energy Exemplar to convert to the AURORA
12 production cost model from the GRID production cost model for forecasting
13 PacifiCorp's NPC. PacifiCorp is expecting to use AURORA for forecasting power
14 costs in Oregon in the NPC forecast proceeding filed next year.

15 **Q. Please describe how the Stipulation addresses the transition from GRID to**
16 **AURORA.**

17 A. As part of the transition from the GRID production cost model to the AURORA
18 production cost model, PacifiCorp agrees to hold a workshop before filing next year's
19 NPC forecast mechanism²⁷ and provide access to the AURORA production cost
20 model.

²⁷ PacifiCorp has proposed a new power cost forecast mechanism in the current GRC, Docket No. UE 374. References to the NPC forecast mechanism in this Stipulation are intended to include any future TAM or other new power cost forecast mechanism adopted by the Commission.

1 **Q. Please describe the workshop contemplated in the Stipulation.**

2 A. The workshop will provide information for parties on the transition from GRID to
3 AURORA, and will also provide information on the DA/RT Adjustment and how the
4 benefits of nodal pricing would be captured by AURORA prior to the filing of the
5 NPC forecast mechanism. PacifiCorp will provide all inputs, data, model settings,
6 additional constraints, and any other modeling changes that are identical to those
7 included in the AURORA model runs to be used for the Company's NPC forecast
8 mechanism's initial filing and workshop.

9 **Q. Will Parties and stakeholders have access to AURORA?**

10 A. Yes. In the Stipulation, PacifiCorp agrees to provide AURORA licenses to
11 Commission Staff and intervenors for each future NPC forecast mechanism.
12 PacifiCorp will provide all inputs, data, model settings, additional constraints, and
13 any other modeling changes that are identical to those included in the AURORA
14 model runs used for the Company's NPC forecast mechanism filing and workshop.
15 The Parties agree that the costs of this license, training, and data sets will be included
16 for cost recovery in any NPC forecast mechanism until the Company's next GRC.
17 PacifiCorp additionally agrees to conduct one AURORA model run per intervenor, so
18 long as the request is reasonable and PacifiCorp has a reasonable time to complete the
19 request during future NPC forecast mechanism proceedings.

20 **Modeling of PacifiCorp's Coal Units**

21 **Q. Please explain what the "must run" setting is and why the Company includes**
22 **this setting for coal units in GRID.**

23 A. The "must run" setting for coal units in GRID is used to represent actual operational

1 practice as closely as possible for normalized ratemaking purpose. In regulatory
2 ratemaking, the forecasted NPC is set on a normalized basis. GRID is designed to
3 model the NPC with load, market conditions, prices, generation resources, and
4 operating practices under normal conditions. Cycling coal units happens infrequently
5 in actual operations, therefore, coal units in GRID are modeled as closely to how they
6 are designed in actual operations, as base load units, i.e., “must run.”

7 **Q. How does the Stipulation resolve Parties’ concern around the “must run” setting**
8 **in the NPC modeling?**

9 A. In the Stipulation, PacifiCorp agrees to remove the “must run” constraint on the
10 modeling of the Company’s coal units, as part of the transition to AURORA.

11 **Q. Does the Stipulation provide for additional information being provided about**
12 **modeling PacifiCorp’s coal units?**

13 A. Yes. PacifiCorp additionally agrees to perform a one-off informational AURORA
14 model run, based on the initial NPC forecast filing, that uses an average coal price for
15 purposes of dispatching coal plants and removes any operational constraints related to
16 the minimum take provisions in the coal supply agreements. This one-off study will
17 be provided in the initial NPC forecast filing as part of the 15-day workpapers until
18 all coal costs are removed from Oregon rates.²⁸

19 **Review of New Coal Supply Agreements**

20 **Q. Does this Stipulation require PacifiCorp to provide additional information on**
21 **Coal Supply Agreements (CSA)?**

22 A. Yes. Through this Stipulation, PacifiCorp agrees to provide testimony in the initial

²⁸ PacifiCorp would not need to perform this model run after filing the NPC forecast for calendar year 2029.

1 TAM or other NPC forecast filing regarding the prudence of any CSAs that were
2 entered into after its reply testimony of the previous year's NPC forecast proceeding.
3 PacifiCorp will notify Parties in the event of the execution of a CSA following the
4 Company's initial testimony but prior to conclusion of the NPC forecast filing and
5 work with Parties to identify the appropriate review timeline, regulatory process and
6 rate implementation.

7 **New Wind and Transmission Projects**

8 **Q. Please describe the new owned wind projects expected to come online in 2020.**

9 A. PacifiCorp's new wind resources (New Wind Projects) are planned be in service by
10 the end of 2020. The New Wind Projects are TB Flats I, TB Flats II, Cedar Springs
11 II, Ekola Flats, Pryor Mountain and the repowering of Foote Creek.

12 **Q. Please describe how the Stipulation addresses the costs and benefits of the New**
13 **Wind Projects in the event the projected online date is delayed.**

14 A. If these wind resources are online on or before December 31, 2020, the full value of
15 ratemaking benefits will be included in TAM rates beginning January 1, 2021. In the
16 event that the commercial in-service date of one or more of the New Wind Projects is
17 delayed beyond December 31, 2020, the Parties agree that customers will retain the
18 full value of ratemaking benefits beginning with the commercial in-service date, but
19 that Schedule 201 rates will be updated coincident with the timing of the rate
20 recovery of each New Wind Project, which is anticipated to be determined in
21 docket UE 374. Parties agree to support aligning the timing of the rate effective dates
22 in docket UE 374 to match the commercial in-service dates so long as the project
23 comes online before July 1, 2021. In the event that the cost recovery is approved

1 earlier than the online date projected in the 2021 TAM, the benefits forecasted in the
2 2021 TAM will be proportionately increased to reflect the early online date. In the
3 event that the cost recovery is delayed beyond the online date projected in the 2021
4 TAM, but still comes online in 2021, the benefits forecasted in the 2021 TAM will be
5 proportionately reduced to account for the delay. For example, if the final forecast of
6 2021 benefits from a wind project is \$12 million over 365 days and a plant is delayed
7 for 60 days beyond the online date forecast in the 2021 TAM final update, the benefit
8 that will be included in Schedule 201 will be approximately \$10 million.²⁹ In the
9 event that the commercial in-service date for a project is delayed beyond July 1, 2021,
10 PacifiCorp will notify the Parties, and Parties will meet to discuss what actions need
11 to be taken.

12 **EIM Benefits**

13 **Q. Please describe the Stipulating Parties' agreement related to the EIM benefits**
14 **forecast for the 2021 TAM.**

15 A. The Parties agree that PacifiCorp's calculated EIM inter-regional transfer benefits for
16 2021 are reasonable and appropriate. PacifiCorp's forecast for EIM benefits will be
17 updated consistent with the other updates traditionally filed for the TAM. PacifiCorp
18 additionally agrees to an unspecified increase of \$213,429 to EIM benefits. Part of
19 this increase, \$30,593, has been included in the June Update.

20 **Q. How does the Stipulation address the EIM benefits for future NPC forecast**
21 **filings?**

22 A. The Parties have agreed that the manner in which EIM benefits were set in this

²⁹ \$12 million / 365 days = \$32,877 per day. A 60-day delay at \$32,877 per day equals an approximately \$2 million reduction in benefits that would be included in the Schedule 201 rate change.

1 proceeding does not set a precedent for the methodology to be used going forward.

2 **Q. Is there any additional information that PacifiCorp will provide to Parties?**

3 A. Yes. PacifiCorp has agreed to provide additional information on CAISO's
4 calculation of EIM benefits, including making the additional supporting
5 documentation that is available to PacifiCorp available for review.

6 **Unspecified NPC Adjustment**

7 **Q. Please explain the unspecified NPC Adjustment.**

8 A. In order to resolve the issues in this proceeding, the Parties agreed to an unspecified
9 reduction to Oregon-allocated NPC of \$2.25 million.

10 **Economic Cycling**

11 **Q. Please describe the Parties' agreement related to Economic Cycling.**

12 A. PacifiCorp agrees to hold a quarterly call in 2021 with Parties to provide information
13 on the actual operations of Energy Supply Management including the dispatch of its
14 coal facilities and market conditions. PacifiCorp additionally agrees to provide a
15 study on the costs and benefits of economic cycling including the non-fuel cost
16 impacts by March 1, 2021.

17 **Jim Bridger Selective Catalytic Reduction (SCR)**

18 **Q. Please describe the issue related to Jim Bridger's SCRs.**

19 A. In PacifiCorp's ongoing GRC, PacifiCorp has included the costs associated with the
20 installation of SCRs on Jim Bridger Units 3 and 4 for recovery in rates. As part of the
21 warranty on these SCRs, PacifiCorp had an increased minimum operating level.

1 Since the SCRs had not been included in rates until now, the minimum operating
2 level has been modeled at a pre-SCR level.

3 **Q. Please describe how the Stipulation addresses this issue.**

4 A. In the event the Commission disallows full cost recovery for the capital associated
5 with these SCR investments, PacifiCorp agrees to return its power cost models to an
6 adjusted minimum operating level for Jim Bridger Unit 4. Currently, Jim Bridger
7 Unit 3 has lower minimum operating level than its pre-SCR level, therefore, Jim
8 Bridger Unit 3 minimum operating level will stay at the current level and is not
9 affected by the outcome of the GRC.

10 **Legacy Pension Costs at the Deer Creek Mine**

11 **Q. Please describe Parties' agreement related to Legacy Pension Costs at the Deer**
12 **Creek Mine.**

13 A. Parties agree that an adjustment to move legacy United Mine Workers of America
14 pension costs associated with the Deer Creek Mine from the TAM and into base rates
15 is appropriate. Parties agree to support this adjustment in PacifiCorp's current GRC.

16 **Wheeling Revenues**

17 **Q. Please describe Parties' agreement related to Wheeling Revenues.**

18 A. The Parties agree that the inclusion of wheeling revenues in the TAM and an
19 attendant change to the TAM Guidelines (or APCA Guidelines) should be considered
20 in the GRC, and PacifiCorp agrees to make any appropriate adjustments to the
21 2021 TAM for wheeling revenues based on the Commission's final order in the
22 current GRC.³⁰

³⁰ Docket No. UE 374.

1 **Transmission Line Losses**

2 **Q. Please describe Parties' agreement related to Transmission Line Losses.**

3 A. PacifiCorp agrees to include transmission line loss savings of 11.6 aMW in the
4 Wyoming East load bubble for the GRID model in the 2021 TAM.

5 **Wholesale Sales**

6 **Q. Has PacifiCorp agreed to provide additional information on wholesale sales?**

7 A. Yes, in future NPC forecast proceedings, PacifiCorp agrees to provide the
8 Commission for the most recent past actual calendar year, the \$/megawatt-hour
9 (MWh) of bilateral trades for each hour of the sales period, total wholesale sales
10 revenue (\$), total energy delivered (MWh) through wholesales sales, hourly
11 generation for PacifiCorp owned generation, and monthly generation unit production
12 costs (\$/MWh) for the most recent past actual calendar year. If the Company joins an
13 expanded market in the future such as the proposed CAISO Extended Day-Ahead
14 Market, the Company agrees to work with intervenors to identify additional
15 wholesale sales data to be provided in future NPC forecast filings.

16 **Long-term Opt-out Charge Sample Calculation**

17 **Q. Please describe Stipulating Parties' agreement related to the long-term opt out**
18 **charge under Schedule 296.**

19 A. Parties to the Stipulation agree, that in PacifiCorp's current GRC, they will support
20 Calpine Solutions' proposal to amend NPC forecast guidelines (TAM Guidelines or
21 APCA Guidelines, as applicable) to provide a sample calculation of Schedule 296 as

1 applicable to customers currently served under rate Schedules 30-Secondary and 48-
2 Primary.³¹

3 **General Terms**

4 **Q. If the Commission approves the Stipulation, will the Company file revised tariff**
5 **sheets?**

6 A. Yes. The Company will file revised tariff sheets for Schedules 201, 205 (if
7 necessary), 294, and 295 as a compliance filing in docket UE 375. The revised tariff
8 sheets will reflect the adjustments agreed upon in the Stipulation and will reflect the
9 TAM Final Update.

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

11 A. The revised tariff sheets will be effective January 1, 2021. PacifiCorp will also file
12 additional tariff sheets throughout 2021 to incorporate rate changes from the new
13 wind and transmission projects if necessary.

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

16 A. Yes. The Stipulating Parties have negotiated the Stipulation as an integrated
17 document, and if the Commission rejects all or any material portion of the Stipulation
18 or imposes additional material conditions on the Stipulation, any of the Parties are
19 entitled to withdraw from the Stipulation.

20 **Q. Are the agreements reflected in the Stipulation binding on the Parties in future**
21 **TAMs or other proceedings?**

22 A. No. The Parties agree that by entering into the Stipulation, no Stipulating Party

³¹ Calpine Solutions/100, Higgins/7-8.

1 approved, admitted, or consented to the facts, principles, methods, or theories
2 employed by any other Stipulating Party in arriving at the terms of this Stipulation,
3 other than those specifically identified in the body of the Stipulation. No Stipulating
4 Party agreed that any provision of this Stipulation is appropriate for resolving issues
5 in any other proceeding, except as specifically identified in the Stipulation.

6 **REASONABLENESS OF STIPULATION**

7 **Q. What is the basis for the Stipulation?**

8 A. The Company's Initial Filing, reply testimony, and the opening testimony filed by
9 CUB, Staff, AWEC, Sierra Club, and Calpine Solutions create an extensive record on
10 the Company's 2021 TAM. The Company responded to multiple sets of data requests
11 and provided updates to its Initial Filing. The Commission held a special public
12 meeting on the Company's coal units, and the Parties had several settlement
13 conferences and resolved their differences through dialogue and negotiations.

14 **Q. Please explain why the Parties believe that the Commission should adopt the**
15 **Stipulation.**

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

- 19 • results in an average rate decrease of approximately 3.9 percent, subject to
20 later TAM updates;
- 21 • includes the NPC and PTC benefits of new wind and new transmission in
22 2021 rates, while also allowing for the appropriate matching of benefits and
23 costs;
- 24 • resolves Parties' issues in this proceeding around PacifiCorp's modeling of
25 coal facilities;

- 1 • ensures information is provided on the prudence on new CSAs signed by
- 2 PacifiCorp
- 3 • supports additional information to Parties for the transition from GRID to
- 4 AURORA; and,
- 5 • updates EIM benefits at a level supported by all Parties;

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

8 **Q. Have the Parties evaluated the overall fairness of the Stipulation?**

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

13 **Q. What do the Parties recommend regarding the Stipulation?**

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

17 **Q. Does this conclude your joint testimony?**

18 A. Yes.