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July 24, 2020

Via Electronic Filing

Public Utility Commission of Oregon
Attn: Filing Center
201 High St. SE, Suite 100
Salem OR 97301

Re: In the Matter of PACIFICORP, dba PACIFIC POWER
Request for a General Rate Revision.
Docket No. UE 374

Dear Filing Center:

Please find enclosed the redacted Rebuttal Testimony and Exhibits of Lance D. Kaufman (AWEC/500-504) and Michael P. Gorman (AWEC/600-603) on behalf of the Alliance of Western Energy Consumers ("AWEC") in the above-referenced docket.

Please note that AWEC's rebuttal testimony contains both Protected Information and Highly Protected Information that is being handled in accordance with Order Nos. 20-040 and 20-131. The confidential version of AWEC's filing has been encrypted with 7-zip software and is being transmitted electronically to the Commission, consistent with Order No. 20-088.

Thank you for your assistance. If you have any questions, please do not hesitate to call.

Sincerely,

/s/ Jesse O. Gorsuch
Jesse O. Gorsuch

Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the **Alliance of Western Energy Consumers' Confidential and Highly Confidential Rebuttal Testimony and Exhibits** upon the parties shown below by sharing copies by electronic mail, consistent with Order No. 20-088.

Dated this 24th day of July, 2020.

Sincerely,

/s/ Jesse O. Gorsuch
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**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UE 374

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER)
)
Request for a General Rate Revision.)
)
_____)

**REBUTTAL TESTIMONY OF LANCE D. KAUFMAN
ON BEHALF OF
ALLIANCE OF WESTERN ENERGY CONSUMERS**

(REDACTED VERSION)

July 24, 2020

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EXHIBIT LIST

CONFIDENTIAL AWEC/501 – PACIFICORP RESPONSES TO DATA REQUESTS

AWEC/502 – EXCERPT OF AWEC OPENING TESTIMONY IN UM 1662

CONFIDENTIAL AWEC/503 - REVISED AWEC ADJUSTMENTS TO KIEWIT
DECOMMISSIONING REPORT

AWEC/504 – AWEC SUMMARY OF PACIFICORP RESPONSE TO AWEC DR 100

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Lance Kaufman. I am the principal economist of Aegis Insight. My qualifications are included in Exhibit AWEC/301. I am testifying on behalf of the Alliance of Western Energy Consumers (“AWEC”).

Q. ARE YOU THE SAME LANCE KAUFMAN WHO FILED OPENING TESTIMONY AND REBUTTAL/CROSS ANSWERING TESTIMONY ON DECOMMISSIONING COSTS FOR AWEC?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I respond to PacifiCorp, dba Pacific Power’s (“PacifiCorp” or “Company”) Reply Testimony as well as the Opening Testimony of Oregon Public Utility Commission (“Commission”) Staff and the Oregon Citizens’ Utility Board (“CUB”).

Q. HAVE THERE BEEN ANY DEVELOPMENTS SINCE PACIFICORP FILED REPLY TESTIMONY?

A. Yes. The parties to this docket have reached a settlement in principle on all rate spread and rate design issues. Accordingly, my testimony does not address these issues.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. I make the following recommendations in my testimony:

1. Find the cost of PacifiCorp’s Jim Bridger Units 3 and 4 SCR and Hunter Unit 1 Baghouse and SCR investments not prudent. Exclude the associated costs from rates.
2. Use the decommissioning and remediation costs originally filed in UM 1968. If the Commission relies on the Kiewit decommissioning study, include AWEC’s proposed adjustments, as modified in this Rebuttal Testimony.

3. Reject PacifiCorp's proposal to offset the unrecovered investment in Cholla Unit 4 with Tax Cuts and Jobs Act ("TCJA") benefits; additionally, exclude certain costs associated with Cholla from rates, as initially recommended by Bradley G. Mullins and modified in this Rebuttal Testimony.
4. Exclude certain costs associated with the Deer Creek Mine closure, as initially recommended by Mr. Mullins and modified in this Rebuttal Testimony.
5. Reject PacifiCorp's Annual Power Cost Adjustment ("APCA") proposal.
6. Condition the prudence of the Energy Vision 2020 Projects and transmission on the cost and benefit commitments identified in Mr. Mullins' testimony.
7. Reject PacifiCorp's wildfire mitigation cost recovery mechanism; alternatively, condition cost recovery under any approved mechanism on an earnings test.
8. Modify the TAM guidelines to require PacifiCorp to provide most workpapers concurrently with its initial annual filing.
9. Consider CUB's recommendation for a non-bypassable charge on direct access to recover coal plant decommissioning costs in UM 2024.

Q. ARE YOU ADDOPTING PREVIOUSLY FILED TESTIMONY IN THIS CASE?

A. Yes. I am adopting the Opening Testimony of Bradley Mullins.

Q. HOW HAVE YOUR RECOMMENDATIONS CHANGED RELATIVE TO OPENING TESTIMONY?

A. I have reviewed PacifiCorp's rebuttal testimony related to the issues that I raised or adopted from Mr. Mullins. I also reviewed related testimony from Staff, Citizens' Utility Board ("CUB"), and Sierra Club. As a result of this review, I withdraw some recommendations where the concerns raised in Opening Testimony have been resolved. I also modify or provide alternate recommendations for issues where PacifiCorp's reply

1 testimony adequately addresses the issue. I withdraw Mr. Mullins' wind repowering
2 removed equipment amortization adjustment. I also withdraw Mr. Mullins' Deer Creek
3 ratebase adjustment. I modify the recommended treatment of liquidated damages and
4 other future costs not appropriately considered unrecovered investment to allow
5 PacifiCorp to defer these costs. Finally, I withdraw certain concerns related to
6 PacifiCorp's proposed changes to the Transition Adjustment Mechanism ("TAM")
7 guidelines.

8 **Q. DO YOU HAVE ANY GENERAL COMMENTS IN RESPONSE TO**
9 **PACIFICORP'S REPLY TESTIMONY?**

10 A. PacifiCorp's testimony contains bald assertions that appear to be attempts to discredit my
11 testimony. For example, PacifiCorp incorrectly argues that my testimony is inconsistent
12 with past testimony or comments.^{1/} PacifiCorp asserts that I misrepresent important facts,
13 which I do not.^{2/} PacifiCorp states that my analysis is seemingly random and concludes
14 that the Commission should disregard AWEC's analysis entirely.

15 PacifiCorp complains about details of my adjustments that were not fully
16 explained, and does not understand why I made modeling choices, but PacifiCorp did not
17 submit a single discovery request or attempt informal communication regarding any of
18 my testimony or analysis. In place of my analysis, PacifiCorp proposes that the
19 Commission rely on vague assertions of "certainty",^{3/} offers numerous counter claims
20 with no supporting analysis or data,^{4/} and recommends the Commission rely on analysis
21 which PacifiCorp admits is incorrect.^{5/}

^{1/} PAC/2300 Link/32, 37, and 38.

^{2/} PAC/2300 Link/38

^{3/} Id. at 49:13-17.

^{4/} See, for example, AWEC/501 at 21-22 (PacifiCorp response to AWEC DR 138 and 139).

^{5/} AWEC/501 at 29 (PacifiCorp response to AWEC DR 145).

1 **Q. IS YOUR TESTIMONY IN THIS CASE CONSISTENT WITH YOUR PAST**
2 **TESTIMONY AND ANALYSIS?**

3 A. Yes. PacifiCorp argues that my testimony is inconsistent with my testimony in Docket
4 No. UE 307^{6/} and Staff comments from the 2013 IRP.^{7/} However, I did not sponsor or
5 approve Staff comments in the 2013 IRP. In UE 307 I testified that PacifiCorp was
6 imprudently investing in Bridger Coal Company rather than burning Powder River Basin
7 coal at the Bridger Plant. My analysis in that docket looked at coal costs over a 20-year
8 period. PacifiCorp claims this is inconsistent with my current testimony which argues
9 that PacifiCorp should have included an analysis of pollution control investments with
10 plant lives consistent with Oregon depreciable lives.

11 My testimony remains consistent because I am not arguing that PacifiCorp should
12 have performed all 2013 IRP analysis with a 2025 Jim Bridger retirement date. I present
13 that analysis as an important scenario which PacifiCorp failed to analyze. My testimony
14 and analysis in UE 307 could certainly have included IRP-type sensitivity analyses.
15 However, the testimony that PacifiCorp was concerned with was net power cost
16 testimony, which is generally acknowledged to have a narrower scope and should not be
17 expected to replicate IRP-type analysis.

18 **Q. WAS PACIFICORP ACCURATE IN CLAIMING THAT YOUR TESTIMONY**
19 **MISREPRESENTED IMPORTANT FACTS?**

20 A. No. PacifiCorp asserts that I misrepresent important facts regarding the 2013 IRP.^{8/} In
21 Opening Testimony I note that the IRP coal analysis Table V3.9 reflected results from the
22 Wyoming and Utah CPCN process. PacifiCorp asserts that this is a misrepresentation.

^{6/} PAC/2300, Link/32
^{7/} PAC/2300, Link/37
^{8/} PAC/2300, Link/38:12-18.

1 However, the paragraph immediately preceding this table in the 2013 IRP states “Table
2 V3.9 shows the PVRR(d) results among the nine different scenarios analyzed in support
3 of the Jim Bridger Unit 3 and Unit 4 CPCN analysis.” If the table in fact represented new
4 analysis and not reproductions of the CPCN analysis, it was the 2013 IRP that was
5 misrepresenting facts, not my testimony in this Docket.

6 **Q. DO YOU HAVE MORE DIRECT RESPONSES TO PACIFICORP’S CONCERNS**
7 **WITH YOUR TESTIMONY AND ANALYSIS?**

8 A. Yes, I address PacifiCorp’s specific concerns with my testimony by issue below. This
9 section is presented as a general response to PacifiCorp’s inaccurate attack on my
10 credibility.

11 II. POLLUTION CONTROL INVESTMENTS

12 **Q. PLEASE SUMMARIZE THIS ISSUE.**

13 A. In Opening Testimony, I argue that PacifiCorp’s Jim Bridger and Hunter pollution
14 control investments were imprudent. I identified multiple failures in PacifiCorp’s
15 approach to analyzing the investments and I showed that, given information available at
16 the time, PacifiCorp should have known that the investments would be uneconomic. In
17 this section I respond to PacifiCorp’s specific concerns with my analysis and I
18 demonstrate that PacifiCorp did not dispute my specific numbers or results.

19 In responding to my testimony PacifiCorp raised long-term fuel supply issues
20 associated with Jim Bridger. Jim Bridger’s long-term fuel supply challenges are another
21 component of Jim Bridger costs that PacifiCorp failed to account for in the SCR
22 investment decision. I supplement my Opening Testimony arguments by presenting
23 additional evidence regarding the long-term fuel supply for Jim Bridger and alternative
24 compliance scenarios.

1 **Q. WHAT ISSUES DID YOU ANALYZE IN YOUR OPENING TESTIMONY IN**
2 **RELATION TO THE JIM BRIDGER SCRS AND HUNTER BAGHOUSE AND**
3 **LOW NOX BURNERS?**

4 A. My Opening Testimony raised the following concerns regarding the pollution control
5 investments:

6 a) Oregon social and political landscape.

7 b) Risk related to coal costs.

8 c) Risk related to market sales.

9 d) Potential economies associated with alternative compliance.

10 e) Potential value of water rights.

11 **Q. WHAT WAS PACIFICORP'S RESPONSE TO YOUR ANALYSIS OF THE**
12 **OREGON POLITICAL LANDSCAPE?**

13 A. I argued that in 2013 Oregon's political landscape pointed to future challenges for coal
14 generation. I stated that PacifiCorp should have included analysis of the SCRs under
15 PacifiCorp's depreciable life. PacifiCorp's response was to misinterpret and discredit my
16 testimony. PacifiCorp offers no alternative analysis demonstrating that SCRs would be
17 economic under a 2025 retirement date for the "with SCR" scenario for Jim Bridger^{9/} or a
18 2029 retirement date for the "with baghouse" scenario for Hunter.^{10/} PacifiCorp does not
19 and cannot dispute that these retirement dates would have made the investments
20 uneconomic.

^{9/} Instead PacifiCorp appears to misinterpret my testimony by providing analysis of a 2025 depreciable life but a 2037 retirement date. PAC/2300, Link/31

^{10/} AWEC 501 at 21 (PacifiCorp Response to AWEC DR 138).

1 **Q. WHAT IS THE BASIS FOR PACIFICORP ASSUMING A 2037 RETIREMENT**
2 **DATE FOR JIM BRIDGER?**

3 A. PacifiCorp appears to have no basis for this. In response to AWEC discovery, PacifiCorp
4 indicates the basis was the Company's depreciation study.^{11/} I participated in the
5 Company's most recent depreciation docket. The Company's depreciation consultant
6 relies on PacifiCorp-provided retirement dates for Jim Bridger. PacifiCorp provides
7 retirement dates to the consultant that are consistent with its IRP. This results in a circular
8 rationale that ignores the fact that, prior to the 2013 IRP, Oregon had set Jim Bridger's
9 depreciable life at 2025. To the extent that the basis for the retirement date is simply to
10 align with the depreciable life, the Oregon depreciable life is as reasonable or a more
11 reasonable end of life date than the non-Oregon depreciable life.

12 **Q. HOW DOES PACIFICORP RESPOND TO YOUR ASSERTION THAT COAL**
13 **COSTS ARE UNCERTAIN AND THAT PACIFICORP SHOULD HAVE**
14 **MODELED COAL RISK?**

15 A. PacifiCorp argues that coal costs have little variance but goes on to admit that the
16 observed variance in coal costs is due to variations in annual consumption at Jim
17 Bridger.^{12/}

18 **Q. IS PACIFICORP CORRECT THAT BCC COAL COST HAS LITTLE**
19 **VARIANCE?**

20 A. No. PacifiCorp asserts without providing evidence that coal costs have historically had
21 lower variance than natural gas, and that this provides a basis for not testing sensitivity of
22 the SCR investments to elevated coal costs. PacifiCorp provides no analysis of historic
23 data to support this assertion. I asked PacifiCorp to provide BCC actual and forecasted
24 coal costs for ten years prior to the 2013 IRP, and PacifiCorp declined to provide data

^{11/} AWEC/501at 18 (PacifiCorp Response to AWEC DR 134).

^{12/} PAC/2600, Ralston/16: 19-17:13.

1 prior to 2011.^{13/} The price per ton went from \$34 in 2010^{14/} to \$94 in 2016. Even if the
2 market price for coal is more stable than natural gas (which has not been established)
3 there has been a clear and striking divergence of BCC coal from market coal costs.
4 PacifiCorp also admits that the cost of BCC coal is sensitive to volumes, and therefore
5 the level of dispatch of Jim Bridger.^{15/}

6 **Q. SHOULD PACIFICORP HAVE KNOWN THAT COAL COSTS WOULD BE**
7 **HIGHER THAN EXPECTED?**

8 A. Yes. Three potential scenarios for Jim Bridger span the range of reasonable outcomes for
9 Jim Bridger fuel needs: low coal consumption, base case or medium coal consumption,
10 and high coal consumption. All three scenarios result in higher costs than assumed by
11 PacifiCorp.

12 The base and high coal consumption scenario results in a depletion of Bridger
13 Coal Company coal reserves, and a transition to market supply for coal. PacifiCorp's
14 2013 Business Plan showed BCC coal reserve depletion in 2024.^{16/} Staff notes in UE 307
15 that PacifiCorp's 2013 expectation for the cost of transitioning to market coal included a
16 [REDACTED] investment to enhance railroad unloading facilities,^{17/} and that this
17 investment was not modeled in the 2013 IRP's SCR scenario analysis.^{18/} This means both
18 the base expectation and the high coal consumption scenario should have had higher coal
19 costs than used in the 2013 IRP and that this information was available to PacifiCorp in
20 2013.

^{13/} AWEC/501 at 16-17 (PacifiCorp Response to AWEC DR 133 Confidential Attachment).

^{14/} Docket UE 207, Staff/200, Dougherty/12.

^{15/} PAC/2600, Ralston/16.

^{16/} Docket UE 307, Staff/200, Kaufman/68 lines 12 and 13.

^{17/} AWEC/501 at 19, 37-38 (Response to AWEC DR 135, Docket UE 307 Staff/400, Kaufman/19).

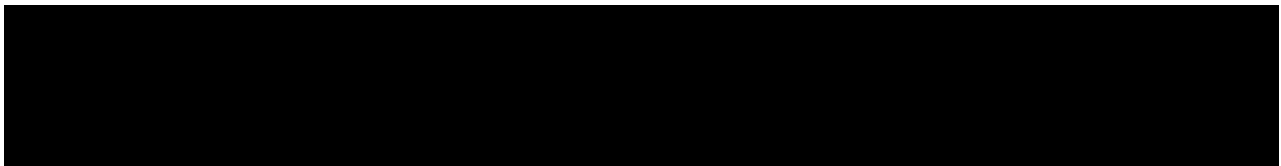
^{18/} Docket UE 307 Staff/200, Kaufman/68 lines 12 and 13; AWEC/501 at 35-36 (OPUC DR 1 from UE 307).

1 The low coal consumption scenario drives BCC coal costs higher due to the fixed
2 operating costs of BCC. According to PacifiCorp, this is the reason actual coal costs were
3 substantially higher than forecasted coal costs. PacifiCorp should have been aware in
4 2013 that BCC coal costs were sensitive to volume, and that a low coal use scenario
5 would result in increased coal costs. This means all three reasonable scenarios for BCC
6 coal costs indicate higher coal costs than used in the 2013 IRP and that this information
7 was available to PacifiCorp in 2013.

8 **Q. HOW DID PACIFICORP MODEL BCC COAL COSTS IN THE 2013 IRP?**

9 A. PacifiCorp used a single coal cost input for all scenarios and sensitivities.^{19/} PacifiCorp's
10 BCC cost forecast appears static and was not sensitive to Jim Bridger dispatch volumes.
11 The forecast used a price per MMBTU that was, on average, [REDACTED] than
12 PacifiCorp's 2013 Business Plan coal forecast which was generated at the same time.²⁰

13 *Figure 1 Confidential BCC Coal Cost Forecasts*



14 **Q. HOW DID PACIFICORP RESPOND TO YOUR CONCERN REGARDING**
15 **MARKET PRICES?**

16 A. PacifiCorp observed that market prices were tied to gas price scenarios. As a result, gas
17 scenarios correspond to market price scenarios. This alleviates some of my concern
18 regarding market prices. However, I continue to have some concern regarding regulated
19 utilities making investments that rely predominantly on off system sales for economic
20 value.

^{19/} AWEC/501 at 27-28 (PacifiCorp Response to AWEC DR 144, Confidential Attachment).

^{20/} AWEC/501 at 16-17 (PacifiCorp Response to AWEC DR 133 Confidential Attachment).

1 **Q. HOW DID PACIFICORP RESPOND TO YOUR CONCERN REGARDING**
2 **ALTERNATE COMPLIANCE?**

3 A. PacifiCorp alleges that alternate compliance options were not available.^{21/} However,
4 PacifiCorp failed to document negotiations for alternate compliance options, and
5 PacifiCorp cannot point to a single piece of communication requesting the alternate
6 compliance options proposed by me or other intervenors.^{22/}

7 **Q. HAVE ANY ADDITIONAL ALTERNATE COMPLIANCE OPTIONS BECOME**
8 **APPARENT TO YOU SINCE YOU DRAFTED YOUR OPENING TESTIMONY?**

9 A. Yes. PacifiCorp is currently pursuing regional haze compliance options for Jim Bridger 1
10 and 2 through reduced dispatch, rather than through SCR installation. PacifiCorp admits
11 to not exploring this as a potential compliance option for Units 3 and 4.^{23/}

12 **Q. IS PACIFICORP'S ARGUMENT THAT COMPLIANCE OPTIONS ARE NOT**
13 **AVAILABLE PURSUASIVE EVIDENCE OF PRUDENCE?**

14 A. No, PacifiCorp did not demonstrate that it prudently negotiated on customers' behalf to
15 avoid costly pollution control investments. PacifiCorp's failure to collaborate with
16 regulators to identify mutually beneficial alternative compliance should not be accepted
17 as a basis for not modeling alternative compliance options. In fact, PacifiCorp should
18 have performed economic analysis of compliance options throughout the regional haze
19 planning process.

^{21/} PAC/2300 Link/15

^{22/} AWEC/501 at 15 (PacifiCorp Response to AWEC Data Request 132).

^{23/} AWEC/501 at 14 (PacifiCorp Response to AWEC Data Request 130).

1 **Q. HOW DID PACIFICORP RESPOND TO YOUR CONCERN REGARDING**
2 **WATER RIGHTS?**

3 A. PacifiCorp disagreed with my forecasted value but provided no alternative forecast.
4 Instead, PacifiCorp continued to assert that the value of water rights should not be part of
5 the SCR investment decision.

6 **Q. IS PACIFICORP'S ARGUMENT THAT WATER RIGHTS SHOULD NOT BE**
7 **VALUED CREDIBLE?**

8 A. No. PacifiCorp admits that Jim Bridger water rights have value.^{24/} PacifiCorp's position
9 is that forecasts are speculative, and therefore forecasts should be zero. If the same
10 rationale were applied to market prices and capital costs, all portfolios would have the
11 identical PVRR, \$0. The reality is that just because something is difficult to forecast does
12 not mean that a clearly incorrect forecast should be used.

13 **Q. PLEASE SUMMARIZE THE ADDITIONAL EVIDENCE YOU PROVIDE IN**
14 **THIS TESTIMONY REGARDING THE PRUDENCE OF JIM BRIDGER AND**
15 **HUNTER SCRS.**

16 A. For the Jim Bridger SCR investments, I show that in 2013 PacifiCorp expected to invest
17 [REDACTED] in railroad facilities for Jim Bridger, but these costs were not modeled when
18 making the SCR investment decision.

19 I also introduce an additional alternate compliance option that PacifiCorp is
20 actively pursuing for Jim Bridger 1 and 2 involving reduced dispatch, but continued coal
21 generation without SCR installation. PacifiCorp failed to explore this option for Jim
22 Bridger 3 and 4 or Hunter Unit 1.

^{24/} AWEC/501 at 29 (PacifiCorp Response to AWEC Data Request 145).

Q. PLEASE SUMMARIZE AND RESPOND TO STAFF'S PROPOSAL REGARDING JIM BRIDGER SCRS.

A. Staff proposes a management disallowance of 10 percent of the cost of the SCR for Jim Bridger 3 and 4, or \$[REDACTED].^{25/} Staff notes that it is difficult to quantify the impact to customers associated with PacifiCorp's actions.

Q. DO YOU AGREE WITH STAFF'S PROPOSAL?

A. No, Staff's proposed adjustment is not sufficient. PacifiCorp's own analysis shows that low gas scenarios result in PVRR(d) losses of [REDACTED] million under the low gas scenarios. These numbers don't account for any of the myriad of concerns raised by AWEC and other parties. While I agree that the exact dollar impact to customers is difficult to quantify, it is likely more than the proposed Staff adjustment.

Q. WHAT IS YOUR RECOMMENDATION FOR THIS ISSUE?

A. I continue to support my initial recommendation of full disallowance of the SCR investments at Jim Bridger 3 and 4 and the baghouse and low NOx burners at Hunter 1.

III. AMI ROLLOUT

Q. PLEASE SUMMARIZE THIS ISSUE.

A. When PacifiCorp implemented its AMI rollout, PacifiCorp retired approximately \$60 million in metering assets.^{26/} This represented 85 percent of all assets in the Oregon Meter account 370.^{27/} In my Opening Testimony I argue that the rollout resulted in dollars in PacifiCorp's ratebase that are appropriately considered dollars associated with the retired meters. I further argued that PacifiCorp should not receive a return on these dollars, consistent with longstanding legal precedent.

^{25/} Staff/700, Soldavini/50:7.

^{26/} AWEC/501 at 2-5 (PacifiCorp Response to AWEC DR 28).

^{27/} Docket No. UM Exhibit PAC/202 Spanos/74 shows the December 31, 2017 meter account at \$70.5 million.

1 **Q. PLEASE SUMMARIZE PACIFICORP’S RESPONSE TO THIS ISSUE.**

2 A. PacifiCorp argues that all plant removed as part of the AMI rollout was fully depreciated,
3 that group depreciation practice allows PacifiCorp to consider all removed assets to be
4 fully depreciated, and therefore none of the dollars remaining in ratebase should be
5 attributed to the retired meters.^{28/}

6 **Q. WHAT IS THE FUNDAMENTAL QUESTION THAT THE COMMISSION**
7 **NEEDS TO ADDRESS FOR THIS ISSUE?**

8 A. Dollars associated with the retired meters clearly remain in PacifiCorp’s proposed
9 ratebase. The fundamental question that the Commission must address is whether it is
10 legal to include a full rate of return on these dollars in customer rates.

11 **Q. HOW CAN DOLLARS ASSOCIATED WITH RETIRED METERS CLEARLY**
12 **REMAIN IN THE PROPOSED RATEBASE?**

13 A. Consider that as part of the AMI rollout, PacifiCorp replaced meters that were in service
14 less than a year.^{29/} PacifiCorp clearly did not fully depreciate these meters, yet when
15 PacifiCorp retired these meters, they reduced both plant in service and accumulated
16 depreciation by equal amounts. This means the original cost of the meter remains in
17 ratebase. The retirement of the AMI meters resulted in a statewide replacement of meters.
18 The table below illustrates how the full-scale retirement of meters is treated under group
19 depreciation. All meters are removed from service, yet ratebase remains unchanged.³⁰
20 Clearly dollars remain in rates that are associated with plant that is not used and useful.

^{28/} PAC/3100 McCoy/39

^{29/} AWEC/501 at 2-5 (PacifiCorp Response to AWEC DR 28, Attachment 1 (Opening Testimony Exhibit did not include DR)

^{30/} This table is for illustration purposes only and does not reflect actual accounting transactions.

1

Table 1

	Original Cost	Accumulated Depreciation	Ratebase
Pre-rollout Meters	\$70 million	\$50 million	\$20 million
Retire Most Meters	(\$70 million)	(\$70 million)	
Post-retirement	\$0	(\$20 million)	\$20 million

2 **Q. HAS THE COMMISSION PREVIOUSLY EXCLUDED DOLLARS ASSOCIATED**
3 **WITH RETIRED PLANT FROM RECEIVING A FULL RETURN?**

4 A. Yes, in addition to the legal precedent involving the Trojan Nuclear Plant, discussed in
5 my Opening Testimony,^{31/} the Commission approved recovery of PacifiCorp's remaining
6 investment in the Deer Creek Mine with a lower return once it was removed from service.
7 The Commission found that its authorized return "reasonably reflects the time value of
8 money, and does not represent a return on the undepreciated investment."^{32/}

9 **Q. DOES PACIFICORP OFFER ANY DISTINCTION BETWEEN THE AMI**
10 **ROLLOUT AND GENERATION PLANT?**

11 A. PacifiCorp provides no explanation for why the retired meters should be treated
12 differently than other retired plant. PacifiCorp's argument in this case hinges on standard
13 practices in group depreciation. However, PacifiCorp admits that generation plant and
14 distribution plant are depreciated according to group depreciation practices. PacifiCorp's
15 argument in this case clearly does not apply to generation plant. There is no basis to treat
16 meters differently than generation with respect to the used and useful requirement for
17 ratebase.

^{31/} AWEC/300, Kaufman/48:4-9.

^{32/} Docket No. UM 1712, Order No. 15-161 at 8 (May 27, 2015).

1 **Q. WHAT DIFFERENTIATES THE RETIREMENTS ASSOCIATED WITH THE**
2 **AMI ROLLOUT FROM NORMAL RETIREMENTS?**

3 A. Normal retirements involve small incremental retirements within a property group. I
4 agree with PacifiCorp that under normal retirement circumstances involving small
5 incremental retirements PacifiCorp's proposed treatment is appropriate. This is because
6 the small incremental retirements are consistent with group depreciation models, which
7 contemplate small incremental retirements across an extended period of time.

8 However, the retirements associated with the AMI rollout resulted in early
9 retirements of nearly every retirement unit within the Oregon meter account. PacifiCorp
10 admits that this is the first time PacifiCorp has made a state-wide replacement of assets in
11 a single depreciation group in Oregon.^{33/} However, PacifiCorp has recently performed an
12 early retirement of wind generation assets, as discussed in AWEC/100 Mullins/10. These
13 retirements involved the early retirements of wind generation assets as part of
14 PacifiCorp's wind repowering project. This situation is very similar to the AMI rollout,
15 where PacifiCorp retired a large group of assets early for economic reasons.

16 There is an important difference in PacifiCorp's accounting for the wind
17 repowering project and the AMI rollout. With the wind repowering project, PacifiCorp
18 recorded depreciation expense equal to the undepreciated value of the retired wind
19 assets.^{34/} The additional depreciation expense recorded for the wind retirements reduced
20 PacifiCorp's ratebase by an amount equal to the undepreciated value of the retired asset,
21 and therefore satisfied ORS 757.355. With the AMI rollout, PacifiCorp made no such
22 adjustment and PacifiCorp's proposed rates are in violation of ORS 757.355.

^{33/} AWEC/501 at 30 (PacifiCorp Response to AWEC DR 147).

^{34/} AWEC/501 at 32-33 (PacifiCorp Response to AWEC Data Request 151).

Q. WHAT IS YOUR RECOMMENDATION FOR THIS ISSUE?

A. I continue to support the recommendation from my Opening Testimony. I recommend a reduction of PacifiCorp's ratebase of \$16,126,628. I recommend a regulatory asset of equal size be established and recovery of the regulatory asset over a 10-year period with an interest rate equivalent to the current 10-year treasury bond yield, plus 100 basis points. PacifiCorp's depreciation expense should be recalculated to reflect the reduced ratebase.

IV. CHOLLA UNIT 4

Q. PLEASE SUMMARIZE AWEC'S CHOLLA RELATED ADJUSTMENTS.

A. In opening testimony Mr. Mullins proposed four Cholla-related adjustments:

1. Unrecovered Investment Interest Rate
2. Cholla Liquidated Damage and CWIP
3. Cholla EDFIT
4. Cholla Property tax

Q. HOW DOES PACIFICOPR'S RESPONSE TESTIMONY ADDRESS THE UNRECOVERED INVESTMENT INTEREST RATE?

A. PacifiCorp does not directly respond to AWEC's testimony regarding the unrecovered investment interest rate. However, PacifiCorp appears to propose an alternative treatment of offsetting unrecovered investment against the Tax Cuts and Jobs Act ("TCJA") benefit, eliminating the need to apply interest to either. As I note later, I disagree with PacifiCorp's offset proposal because it fails to match costs with benefits. I maintain my recommendation to apply a reduced interest rate to the unrecovered plant balance during its amortization period.

1 **Q. PLEASE SUMMARIZE THE LIQUIDATED DAMAGES ISSUE.**

2 A. PacifiCorp has decided to close the Cholla plant early. As part of this closure PacifiCorp
3 expects to experience unrecovered investment and incur liquidated damages associated
4 with its coal supply agreements. In opening testimony PacifiCorp proposed that the
5 unrecovered investment and liquated damages be fixed as part of this rate case and placed
6 into a regulatory asset.^{35/} AWEC argued against this treatment for Cholla CWIP and
7 liquidated damages, recommending that CWIP and liquidated damages be removed, and
8 that liquidated damages be recovered through the a future power cost filing.^{36/} In Rebuttal
9 Testimony, PacifiCorp modified its requested treatment of these costs, recommending
10 that they be offset against the benefits of the TCJA.^{37/} PacifiCorp also argued that
11 liquidated damages should not be considered a power cost, but that if they are considered
12 a power cost, the cost should flow through the TAM mechanism.

13 **Q. WHAT IS YOUR RESPONSE TO PACIFICORP'S PROPOSAL TO OFFSET**
14 **THE CHOLLA UNRECOVERED INVESTMENT WITH BENEFITS FROM THE**
15 **TAX CUT AND JOBS ACT?**

16 A. I do not believe this is appropriate treatment. PacifiCorp includes forecasted costs that
17 will be incurred over several years in the future in the unrecovered investment amount.^{38/}
18 Under PacifiCorp's proposal future costs are netted against past benefits. This raises
19 several problems.

- 20 1. The TCJA benefits should be returned to customers as soon as possible, while the
21 unrecovered investment should be recovered from customers through 2025 to match the
22 timing of the costs of early retirement with the benefits of early retirement.

^{35/} PAC/1300 McCoy/33

^{36/} AWEC/100 Mullins/5

^{37/} PAC/2000 Wilding/9

^{38/} AWEC/501 at 31 (PacifiCorp Response to AWEC Data Request 149).

1 2. The Commission will lose the opportunity to review the actual costs and make a prudence
2 determination on them.

3 3. If actual costs are below forecasted costs there is no clear method to true up the
4 differences.

5 4. PacifiCorp makes no adjustment for rate of return, effectively allowing PacifiCorp free
6 use of the TCJA benefit between the present and the date that PacifiCorp actually incurs
7 the costs.

8 **Q. PLEASE EXPLAIN WHAT FUTURE COSTS PACIFICORP PROPOSES TO FIX**
9 **IN THIS RATE CASE.**

10 A. PacifiCorp's proposal includes \$19.6 million in liquidated damages, which AWEC
11 addressed in Opening Testimony, and \$35 million in decommissioning cost. PacifiCorp
12 states that the decommissioning cost will not be incurred until the end of 2025.

13 **Q. HOW DOES THE COMMISSION LOSE THE OPPORTUNITY TO REVIEW**
14 **ACTUAL COSTS AND MAKE PRUDENCE DETERMINATIONS?**

15 A. The Commission does not have all information necessary to make a prudence
16 determination on these costs because the Company has not yet incurred them. However,
17 under the Company's proposal there is a risk that the Company will argue retroactive
18 ratemaking prevents parties from contesting the prudence of these costs after the costs are
19 known.

20 **Q. IS THERE AN EXPECTATION THAT CUSTOMERS WILL PAY FOR ACTUAL**
21 **DECOMMISSIONING COSTS FOR CHOLLA?**

22 A. Yes, my understanding is that, because Cholla is a common closure among all of
23 PacifiCorp's states, all states will pay their allocated share of actual, prudently incurred
24 decommissioning costs.^{39/} The Company's proposal does not clearly spell out how actual

^{39/} 2020 Protocol §§ 4.1.3.1, 4.3.1.4.

1 costs will be trued up when some decommissioning costs have been embedded in the
2 unrecovered investment TCJA offset.

3 **Q. DOES THE COMPANY'S PROPOSAL FAIRLY ACCOUNT FOR THE TIME**
4 **VALUE OF MONEY?**

5 A. No. Under PacifiCorp's proposal, PacifiCorp will receive free access to capital because
6 the TCJA benefits will cease to accumulate a return between the time that PacifiCorp
7 records the transaction benefit write-down and when PacifiCorp incurs the expenses.

8 **Q. WHAT ALTERNATIVE WOULD REMEDY YOUR CONCERNS RELATED TO**
9 **THESE ISSUES?**

10 A. These costs should be recovered in a manner that allows parties to review the costs as
11 they are incurred. PacifiCorp's effort to group all these costs together makes it difficult
12 for parties to review the costs and ensure they are properly accounted for. I recommend
13 that rather than offset future costs, PacifiCorp file to defer these costs. This will allow
14 parties to carefully review the costs once they are known and measurable. Unrecovered
15 investment, which is a known cost, should be amortized through to 2025 and the TCJA
16 benefits should be returned to customers in 2021.

17 **Q. AWEC PREVIOUSLY RECOMMENDED THAT LIQUIDATED DAMAGES BE**
18 **INCLUDED IN A POWER COST ADJUSTMENT. DO YOU CONTINUE TO**
19 **SUPPORT THAT RECOMMENDATION?**

20 A. Either a deferral of liquidated damages or inclusion in a power cost adjustment
21 mechanism would be acceptable to AWEC.

1 **Q. PLEASE SUMMARIZE THE EDFIT ISSUE.**

2 A. Mr. Mullins showed in opening testimony that a portion of EDFIT will be freed up with
3 the closure of Cholla 4.^{40/} PacifiCorp agrees.^{41/} I support Mr. Mullins' recommended
4 offset.

5 **Q. PLEASE SUMMARIZE THE CHOLLA PROPERTY TAX ISSUE.**

6 A. In Opening Testimony, AWEC proposed excluding Cholla property tax.^{42/} Mr. Mullins
7 argued that because Cholla 4 has been removed from rates, property tax associated with
8 Cholla 4 should also be removed from rates. PacifiCorp responded that PacifiCorp will
9 continue to pay property tax on Cholla after the closure.^{43/}

10 **Q. DID PACIFICORP'S REPLY TESTIMONY PROVIDE ANY ARGUMENT FOR**
11 **WHY EXPENSE ASSOCIATED WITH PROPERTY THAT IS NOT USED AND**
12 **USEFULL SHOULD BE INCLUDED IN RATES?**

13 A. No. PacifiCorp only argues that property tax will continue to be assessed and, therefore,
14 customers should pay this expense.^{44/}

15 **Q. WHAT IS THE BASIC QUESTION THAT THE COMMISSION HAS TO**
16 **DECIDE REGARDING THIS ISSUE?**

17 A. The Commission must decide whether the property tax for Cholla violates ORS 757.355.
18 If Cholla is not used and useful, can PacifiCorp charge customers for Cholla property
19 tax?

20 **Q. DO CUSTOMERS RECEIVE ANY BENEFIT FROM PROPERTY TAX**
21 **ASSOCIATED WITH CHOLLA ONCE IT IS REMOVED FROM SERVICE?**

22 A. I am not aware of any benefit, and PacifiCorp has not identified any benefit.

^{40/} AWEC/100, Mullins/6
^{41/} PAC/3100, McCoy/35 and 36.
^{42/} AWEC/100, Mullins/6.
^{43/} PAC/3100, McCoy/52.
^{44/} PAC/3100, McCoy/52.

1 **Q. MR. MULLINS' OPENING TESTIMONY NOTES THAT PACIFICORP DID**
2 **NOT PROVIDE THE AMOUNT OF PROPERTY TAX ASSOCIATED WITH**
3 **CHOLLA 4 AND REQUESTED THAT PACIFICORP IDENTIFY THIS**
4 **AMOUNT IN ITS REPLY TESTIMONY. DID PACIFICORP RESPOND TO**
5 **THIS REQUEST?**

6 A. No; however, PacifiCorp does state that that the "state of Arizona will continue to assess
7 the value of this facility in which the Company will continue to incur property tax
8 expense."^{45/} Accordingly, the amount of property tax associated with Cholla 4 should be
9 readily identifiable.

10 **Q. WHAT IS YOUR RECOMMENDATION FOR THE COMMISSION?**

11 A. I adopt Mr. Mullins' original recommendation that Cholla property tax be excluded from
12 rates. Alternatively, if the Commission finds that these costs are legally allowable in
13 rates, I recommend that they be included with decommissioning costs and trued up at the
14 end of the decommissioning process. This will ensure customers do not pay more for
15 property taxes than is assessed, recognizing that PacifiCorp has not identified the amount
16 of property taxes applicable to Cholla 4 and that PacifiCorp admits that property tax will
17 decline as Cholla is decommissioned.^{46/}

18 **V. DEER CREEK MINE**

19 **Q. WHAT ISSUES DID AWEC RAISE IN OPENING TESTIMONY RELATED TO**
20 **THIS ISSUE?**

21 A. Mr. Mullins raised three issues:
22 1. Ratebase
23 2. Coal Lease Abandonment Royalties, and
24 3. Closure Costs

^{45/} PAC/3100, McCoy/52:22-23.

^{46/} AWEC/501 at 34 (PacifiCorp Response to AWEC Data Request 152).

1 PacifiCorp's reply testimony resolves Mr. Mullins' issue regarding ratebase; however, I
2 continue to maintain the royalties and closure cost issues.

3 **Q. PLEASE SUMMARIZE THE CLOSURE COST ISSUE.**

4 A. In Opening Testimony AWEC noted that the Deer Creek closure costs were substantially
5 higher than expected and recommended including only the forecasted closure costs.
6 Expected closure costs were \$20 million, while actual closure costs were \$45 million.^{47/}
7 AWEC also recommended excluding future royalty payments. PacifiCorp responds that
8 even with closure costs 225 percent higher than forecast, the closure of Deer Creek was
9 economic. However, PacifiCorp failed to adequately justify the cost overrun. PacifiCorp
10 had not met its burden of showing that the cost overruns were prudent.

11 **Q. WHAT WAS PACIFICORP'S EXPLANATION FOR COST OVERRUNS?**

12 A. PacifiCorp states that "the increase is primarily due to the inability to gain approval of the
13 bulkhead engineering designs and time required to permit and construct the alternate de-
14 watering pipeline to the Huntington plant."^{48/} PacifiCorp does not explain why
15 PacifiCorp failed to gain approval, nor does PacifiCorp attempt to justify this failure as a
16 reasonable result of prudent management. PacifiCorp relies instead on an observation that
17 even with the poorly managed costs, the closure of the mine was more economic than
18 continued operation of the mine.

^{47/} AWEC/102, Mullins/16

^{48/} PAC/3100, McCoy/42

1 **Q. PLEASE DESCRIBE THE COSTS INCURRED AS A RESULT OF THE**
2 **EXTENDED CLOSURE PERIOD.**

3 A. Nearly all the costs between 2016, the original closure date, and 2018, the actual closure
4 date, were labor costs or payments to the PacifiCorp subsidiary East Mountain Energy.^{49/}
5 Costs included PacifiCorp management fees, incentive payments, bonuses, and awards.

6 **Q. GIVEN THAT COST OVERRUNS WERE THE RESULT OF FAULTY PLANS,**
7 **AND THAT THEY INCLUDE PRIMARILY PAYMENTS TO SUBSIDIARIES,**
8 **INCENTIVES, AND BONUSSES, IS THE OVERAL COST-BENEFIT OF THE**
9 **CLOSURE RELEVANT?**

10 A. No. The Commission should focus on why there were cost overruns and whether the
11 additional costs are appropriately included in rates.

12 **Q. WHAT IS YOUR RECOMMENDATION FOR THIS ISSUE?**

13 A. I adopt Mr. Mullins' recommendation that PacifiCorp's recovery for closure costs be
14 capped at the amount assumed in UM 1712.

15 **Q. PLEASE SUMMARIZE THE COAL LEASE ABANDONMENT ROYALTY**
16 **ISSUE.**

17 A. In Opening Testimony, Mr. Mullins recommended excluding future royalty costs from
18 rates. PacifiCorp can defer these costs if PacifiCorp incurs them. PacifiCorp appears to
19 agree that royalty costs are uncertain and testifies that it "does not have a specific time
20 line of when actual royalty obligations will be settled."^{50/} I adopt Mr. Mullins'
21 recommendation to exclude these costs from rates at this time.

^{49/} AWEC/504.
^{50/} PAC/3100, McCoy/45:17-18.

VI. ANNUAL POWER COST ADJUSTMENT

Q. PLEASE SUMMARIZE AWEC’S RECOMMENDATION IN ITS OPENING TESTIMONY ON PACIFICORP’S ANNUAL POWER COST ADJUSTMENT.

A. AWEC opposed PacifiCorp’s Annual Power Cost Adjustment (“APCA”), which would allow dollar-for-dollar recovery of PacifiCorp’s net power costs (“NPC”). AWEC argued that this mechanism was contrary to Commission policy that provides for a sharing of risk in NPC variances between customers and shareholders through the existing Power Cost Adjustment Mechanism (“PCAM”). AWEC also showed that the APCA is nothing more than PacifiCorp’s attempt to relitigate issues the Commission has rejected multiple times before.^{51/} Commission Staff and the Oregon Citizens’ Utility Board similarly oppose the APCA.^{52/}

Q. HOW DOES PACIFICORP RESPOND TO AWEC’S AND OTHER PARTIES’ ARGUMENTS AGAINST THE APCA?

A. PacifiCorp’s primary argument seems to be that circumstances have changed since it previously requested modifications to the PCAM, and that now is the right time for the Commission to revisit its principles underlying the existing PCAM structure. Specifically, PacifiCorp claims that variable renewable generation is difficult to forecast accurately, and the increased penetration of this generation, driven both by economics and state/regional policies, will exacerbate NPC forecast errors.^{53/}

Q. IS PACIFICORP’S POSITION SUPPORTED BY THE EVIDENCE?

A. No. It is certainly true that the amount of variable generation in PacifiCorp’s portfolio, and in the West generally, has increased and will continue to increase in the future. It is

^{51/} AWEC/100, Mullins/27:1-37:17.

^{52/} Staff/1300, Gibbens/9:1-41:18; CUB/100, Jenks/30:3-45:3.

^{53/} PAC/2000, Wilding/56:18-57:13; PAC/3000, Graves/14:9-15:4.

1 not true, however, that this shift has made it more difficult for PacifiCorp to forecast its
2 NPC overall or exacerbated the Company's under-recovery of NPC. In fact, the opposite
3 has occurred.

4 PacifiCorp provides its forecasted and actual NPC for the previous twelve years in
5 Table 6 on page 55 of Mr. Wilding's testimony. That data shows that, for the six years
6 between 2008 and 2013, deviations between forecasted and actual NPC averaged
7 \$27,249,869. For the six-year period between 2014 and 2019, by contrast, deviations
8 between forecasted and actual NPC averaged \$19,023,974. In fact, using the data from
9 Table 7 on page 65 of Mr. Wilding's testimony, one can see that PacifiCorp's forecasts
10 over the 2014-2019 period improved even without incorporating the effects of the day
11 ahead/real time ("DART") adjustment – the average deviation was \$24,329,420, still \$3
12 million less on average than the deviations the Company experienced between 2008 and
13 2013. This improvement occurred even as PacifiCorp was "add[ing] 4,789 MW of new
14 renewable resources."^{54/} It is also in spite of the fact that: (1) PacifiCorp's NPC was
15 approximately \$45 million higher on average over the latter six-year period than the
16 earlier six-year period (thus allowing for the potential for greater deviations from the
17 forecast); and (2) a portion of the latter six years of data also includes EIM transactions
18 and production tax credits, which the earlier six-year period did not (thus also creating
19 the potential for greater deviations from forecast). In other words, PacifiCorp's own data
20 contradicts its primary argument that increased renewable penetration will lead to greater
21 NPC forecast errors.

^{54/} PAC/2000, Wilding/59:15.

1 **Q. HOW DOES AWEC'S PROPOSAL FOR EV 2020 PERFORMANCE**
2 **REQUIREMENTS AFFECT VARIABILITY OF POWER COSTS?**

3 A. In Opening Testimony Mr. Mullins recommended performance guarantees for the EV
4 2020 projects. This recommendation should offset PacifiCorp's concerns related to
5 renewable generation variability.

6 **Q. IS PACIFICORP'S POSITION CONTRADICTED BY ANY OTHER DATA?**

7 A. Yes. PacifiCorp's testimony glosses over important historical context for the
8 development of the current PCAM.^{55/} Both PacifiCorp's and Portland General Electric
9 Company's ("PGE") existing PCAMs have their origin in Commission Order 05-1261, in
10 which the Commission rejected a stipulation to create a PCAM for PGE's hydro
11 generation.^{56/} In its decision, the Commission noted the significant annual variability of
12 hydro generation.^{57/} Such variability warranted "a mechanism to adjust PGE's rates for
13 variations in hydro-related costs ... *if it is reasonably designed.*"^{58/} The Commission
14 then identified four criteria for a properly designed PCAM: "(1) Limited to Unusual
15 Events; (2) No Adjustments if Overall Earnings are Reasonable; (3) Revenue Neutrality;
16 and (4) Long-Term Operation."^{59/} Staff's Opening Testimony discusses these criteria in
17 detail.^{60/} Later in UE 180, the Commission used these criteria to develop a PCAM for
18 PGE that applied to its total power costs,^{61/} which is the same PCAM in existence today
19 for both PGE and PacifiCorp. The variability of hydro generation, however, was the
20 initial instigator for the development of these PCAMs.

^{55/} PAC/3000, Graves/5:1-19.

^{56/} Docket Nos. UE 165/UM 1187, Order No. 05-1261 (Dec. 21, 2005).

^{57/} Id. at 8.

^{58/} Id. (emphasis added).

^{59/} Id.

^{60/} Staff/1300, Gibbens/12:19-20:11.

^{61/} Docket Nos. UE 180/UE 181/UE 184, Order No. 07-015 at 26-27 (Jan. 12, 2007).

1 **Q. WHY IS THIS HISTORY RELEVANT TO PACIFICORP'S APCA?**

2 A. Because intermittent renewable generation has been shown to be no more variable than
3 hydro generation. In UM 1662, AWEC's testimony showed that the year-to-year
4 variability of PacifiCorp's wind generation between 2008 and 2013 had a relative
5 standard deviation of approximately 11%.^{62/} Meanwhile, over that same period, the
6 relative standard deviation of the variability in PacifiCorp's hydro output was 14%.^{63/}
7 Consequently, the variability of renewable resources is not a basis to deviate from a
8 PCAM structure that was created specifically to address similar variability in hydro. It is
9 a basis to maintain this structure.

10 **Q. HOW DO YOU RESPOND TO PACIFICORP'S ARGUMENT THAT OTHER**
11 **NORTHWEST UTILITIES THAT HAVE OVER-FORECAST THEIR NPC IN**
12 **RECENT YEARS ARE DISINGUISHABLE FROM THE COMPANY?**

13 A. PacifiCorp's position in its Opening Testimony was that the NPC forecasting challenges
14 it faces are not due to constraints on its own modeling software but are caused by market
15 dynamics that are inherently impossible to forecast and that tend to impose incremental
16 costs on PacifiCorp, thus leading to systematic under-recovery of NPC.^{64/} AWEC argued
17 in Opening Testimony that, if this were the case, one would expect all utilities to under-
18 forecast their power costs, as they all are subject to the same market dynamics. Both
19 PGE and Avista in Washington, however, have over-forecast their power costs in recent
20 years.^{65/}

21 PacifiCorp argues in response that these utilities are different because they have
22 different generation portfolios. This is undoubtedly true, but that is not the argument

^{62/} AWEC/502 at 3.

^{63/} Id.

^{64/} PAC/600, Graves/3:14-6:16.

^{65/} AWEC/100, Mullins/35:14-36:9.

1 PacifiCorp has made to justify the APCA. Indeed, PacifiCorp's Reply Testimony
2 contradicts itself in attempting to distinguish the Company from other utilities. On the
3 one hand, Mr. Wilding argues that Avista is distinguishable from PacifiCorp due to the
4 large amount of hydro generation in its portfolio, as compared to intermittent
5 renewables,^{66/} while on the other hand, Mr. Graves claims that "the main problem that
6 PacifiCorp faces is not the forecasting model itself. Rather, it is the inherent difficulty in
7 forecasting one year in advance of the hourly demand and prices of purchases and sales,
8 as well as the generation profile of renewable resources, *including hydropower*."^{67/} The
9 reality is that, if PacifiCorp is indeed facing a systematic under-forecast of NPC, the
10 problem almost surely lies in its power cost model, GRID, not inescapable and
11 unpredictable market forces to which all utilities are subject.

12 **Q. AWEC AND STAFF ALSO ARGUED THAT NOW IS NOT THE RIGHT TIME**
13 **TO IMPLEMENT THE APCA BECAUSE PACIFICORP INTENDS TO**
14 **REPLPACE GRID WITH A NEW NPC FORECASTING MODEL. HOW DOES**
15 **PACIFICORP RESPOND?**

16 A. PacifiCorp claims that that the energy landscape is constantly changing, and therefore
17 acceptance of this argument would mean that "there will always be a reason to stand in
18 the way of updating [the PCAM]."^{68/} There is a substantial difference, however, between
19 the evolution of the generation mix or even changes to energy markets, which can be
20 incorporated into and accommodated by power cost forecasting models (as PacifiCorp's
21 assimilation of EIM benefits into its NPC forecasts demonstrates), and the creation of an
22 entirely new power cost forecasting model. AWEC's position, which appears to be
23 shared by Staff and CUB, is that to the extent PacifiCorp faces systematic NPC under-

^{66/} PAC/2000, Wilding/72:7-73:3.

^{67/} PAC/3000, Graves/30:6-9 (emphasis added).

^{68/} PAC/2000, Wilding/68:10-11.

1 recovery, this is most likely due to the Company's modeling software, not market forces.
2 PacifiCorp's change to a new forecasting model offers the ideal opportunity to test which
3 theory is correct. Only after the Commission has this information should it consider
4 changes to the PCAM, particularly ones as drastic as PacifiCorp has proposed.

5 VII. ENERGY VISION 2020

6 **Q. PLEASE SUMMARIZE AWEC'S RECOMMENDATION IN ITS OPENING** 7 **TESTIMONY ON THE ENERGY VISION 2020 PROJECTS.**

8 A. AWEC recommended that the prudence of PacifiCorp's decision to invest in the Energy
9 Vision 2020 ("EV 2020") projects be subject to the following conditions to better ensure
10 customer benefits are realized from an economic resource procurement: (1) a hard cap on
11 capital and O&M costs; (2) a hard cap on costs for the D.2 segment of the Energy
12 Gateway transmission project; (3) a guarantee of full PTC and energy benefits from the
13 EV 2020 projects; and (4) a minimum capacity factor for each resource at the level
14 modeled in the RFP bids. These conditions reflect both the Commission's
15 acknowledgment order of PacifiCorp's 2017 IRP and recommendations from the Oregon
16 Independent Evaluator ("IE") overseeing the RFP.

17 **Q. HOW DID PACIFICORP RESPOND IN REPLY TESTIMONY?**

18 A. PacifiCorp generally opposes AWEC's conditions on the prudence of the EV 2020
19 projects. The Company argues that the EV 2020 projects were pursued not solely for
20 economic reasons, but to meet an energy and capacity need that would otherwise be filled
21 with front office transactions ("FOTs").^{69/} It also accuses AWEC of "selectively
22 rel[ying] on the Oregon independent evaluator's report" and defends its RFP modeling.^{70/}

^{69/} PAC/2300, Link/53:11-57:3.

^{70/} Id. at 57:4-61:18.

1 PacifiCorp also minimizes the interconnection issues that effectively disqualified several
2 low cost bids from the RFP.^{71/}

3 **Q. HOW DO YOU RESPOND TO PACIFICORP'S REPLY TESTIMONY?**

4 A. Most of PacifiCorp's arguments are not particularly relevant to AWEC's
5 recommendations. The Company's position that the EV 2020 projects meet an energy
6 and capacity need elides what distinguishes these projects from a more traditional
7 resource acquisition. PacifiCorp is simply saying that the EV 2020 projects are lower
8 cost and lower risk resources than market transactions. That is the same thing as saying
9 that PacifiCorp has acquired these resources for economic purposes – its analysis is based
10 on forecasts of market prices, the ultimate accuracy of which will either justify or not
11 justify its acquisition of the EV 2020 projects. PacifiCorp's own IRP justifies its decision
12 to pursue these projects because they will provide "significant economic benefits for
13 PacifiCorp's customers"^{72/} That is not the same thing as acquiring a resource to meet
14 an identified capacity deficit.

15 Furthermore, AWEC's proposed conditions are nothing more than reiterations of
16 findings and recommendations from both the Oregon IE and the Commission itself,
17 findings and recommendations that were made to protect customers in recognition of the
18 unusual procurement process and the economic nature of the procurement itself.^{73/}
19 PacifiCorp can argue all it wants that the EV 2020 resources represent a traditional
20 resource procurement, but that is simply not how anyone has ever understood this
21 procurement. Similarly, PacifiCorp can take issue with AWEC's proposed conditions,

^{71/} Id. at 62:1-63:14.

^{72/} Docket No. LC 67, PacifiCorp 2017 IRP, Executive Summary at 2.

^{73/} AWEC/100, Mullins/14:6-22, 17:15-18:14.

1 but it is a fact that the IE recommended hard caps on capital and O&M costs both for the
2 generation projects and the D.2 transmission segment, and an unconditional guarantee of
3 full PTC benefits, and that the Commission itself stated a clear intention to insulate
4 customers from “the risk of construction cost overruns, delays or other factors that impact
5 PTC value, or project costs and expected capacity factors that are less favorable than the
6 assumptions presented in the IRP.”^{74/} AWEC’s recommendations do nothing more than
7 ensure these commitments.

8 VIII. WILDFIRE MITIGATION COST RECOVERY

9 **Q. PLEASE SUMMARIZE AWEC’S RECOMMENDATION IN ITS OPENING**
10 **TESTIMONY ON PACIFICORP’S WILDFIRE MITIGATION COST**
11 **RECOVERY MECHANISM.**

12 A. AWEC recommended that the Commission reject the wildfire mitigation cost recovery
13 mechanism. AWEC’s recommendation was based on the following considerations: (1)
14 wildfire mitigation investments are recoverable through the normal rate case process, and
15 if PacifiCorp chooses not to file a rate case to recover these costs in a timely fashion, that
16 is simply evidence that it is recovering its costs overall, including wildfire mitigation
17 costs; (2) PacifiCorp does not need a special cost recovery mechanism to ensure it makes
18 sufficient investments in wildfire mitigation because shareholders benefit from reduced
19 risk of wildfires; and (3) because shareholders benefit from this reduced risk (as do
20 customers), it is appropriate for shareholders to bear a portion of the costs, which can be
21 accomplished through normal regulatory lag.^{75/}

^{74/} Docket No. LC 67, Order No. 18-138 at 8 (Apr. 27, 2018).

^{75/} AWEC/100, Mullins/20:10-26:20.

1 **Q. PACIFICORP STATES THAT WILDFIRE MITIGATION COSTS “ARE**
2 **SIGNIFICANT CAPITAL COSTS APPROPRIATE FOR A RATEMAKING**
3 **MECHANISM SUPPORTED BY DEFERRED ACCOUNTING.”^{76/} HOW DO**
4 **YOU RESPOND?**

5 A. The Commission’s policy on deferred accounting does not support deferrals based only
6 on the significance of the cost. An additional consideration is whether the cost “was
7 foreseeable as happening in the normal course of events, or not likely to have been
8 capable of forecast.”^{77/} Here, PacifiCorp’s wildfire mitigation costs are clearly “capable
9 of forecast” because the Company has provided just such a forecast through 2022.^{78/}
10 Moreover, when costs are capable of forecast, the magnitude of the “harm” to the utility
11 must be “substantial” to warrant a deferral. In this case, the inability to defer capital costs
12 associated with wildfire mitigation does not result in these costs becoming entirely
13 unrecoverable, it only results in regulatory lag for as long as PacifiCorp chooses not to
14 file a rate case; thus, the “harm” to the Company is minimal. That is why the
15 Commission stated in Order 20-147 that “any request for deferral of a capital project will
16 need to be analyzed closely.”^{79/}

17 **Q. PACIFICORP ALSO ARGUES THAT ITS COST RECOVERY MECHANISM AS**
18 **REVISED IN REPLY TESTIMONY RENDERS MOOT AWEC’S ARGUMENTS**
19 **REGARDING EVALUATION OF THESE COSTS IN A GENERAL RATE**
20 **CASE.^{80/} DO YOU AGREE?**

21 A. No. PacifiCorp’s revised mechanism would defer incremental vegetation and wildfire
22 mitigation costs annually. PacifiCorp would file on September 1 of each year, a prudence
23 review would follow, and costs determined to be prudently incurred would be included in

^{76/} PAC/2000, Wilding/49:12-14.

^{77/} Docket No. UM 1147, Order No. 05-1070 at 7 (Oct. 5, 2005).

^{78/} PAC/1100, Lucas/6 (Table 1).

^{79/} Docket UM 1909, Order No. 20-147 at 13 (Apr. 30, 2020).

^{80/} PAC/2000, Wilding/49:19-50:6.

1 rates on March 1 of the following year (i.e., four months after the filing date).^{81/}
2 PacifiCorp's claim that this somehow renders moot AWEC's arguments that these costs
3 should be reviewed in a general rate case is a straw man. AWEC's opposition to special
4 recovery of wildfire mitigation costs is not based on whether parties and the Commission
5 could conduct a prudence review outside of a rate case. It is based on the longstanding
6 principle that the "end result" of a utility's rates is what matters – that the utility is
7 earning a fair and reasonable return overall, regardless of which costs are deemed to be
8 "in" or "out" of rates – which is reflected in the Commission's policy generally
9 disfavoring single-issue ratemaking.^{82/} PacifiCorp's analogy to the Renewable
10 Adjustment Clause ("RAC") is also unpersuasive, as the RAC is a statutory
11 mechanism.^{83/} No statute requires the type of cost recovery mechanism PacifiCorp seeks
12 for wildfire mitigation costs.

13 PacifiCorp's argument also fails to account for the impact that PacifiCorp's
14 annual depreciation and amortization expense of \$338 million greatly exceeds the annual
15 capital spending plan for wildfire mitigation.^{84/} In fact, PacifiCorp may experience
16 ratebase reductions as PacifiCorp accumulates depreciation and amortization.
17 PacifiCorp's proposal has no mechanism to account for reductions in ratebase or other
18 operating expenses.

^{81/} Id. at 47, table 5.

^{82/} Federal Power Comm'n v. Hope Nat. Gas Co., 320 U.S. 591, 603 (1944); Docket No. UG 221, Order No. 12-437 at 26 (Nov. 16, 2012).

^{83/} ORS 469A.100.

^{84/} Exhibit PAC/1301 McCoy/1, lines 22 and 23, and PAC/1100, Lucas/6, which shows \$50 million per year in Oregon allocated capital costs (Distribution plus 25 percent of transmission).

1 **Q. PACIFICORP FURTHER ARGUES THAT IT IS “ONE-SIDED” FOR AWEC TO**
2 **FOCUS ON THE BENEFITS TO SHAREHOLDERS FROM WILDFIRE**
3 **MITIGATION INVESTMENTS.^{85/} HOW DO YOU RESPOND?**

4 A. Again, the Company sets up a straw man in stating that the “hardening of the Company’s
5 facilities does not solely benefit its shareholders.”^{86/} AWEC did not argue that these
6 costs only benefit, and should only be borne by, shareholders. AWEC argued that these
7 costs do not only benefit, and should not only be borne by, customers. AWEC only
8 argued for some sharing, through regulatory lag, of the costs of these investments with
9 shareholders because shareholders indisputably benefit from these investments as well.

10 **Q. IS THERE EVIDENCE THAT SHAREHOLDERS BENEFIT FROM WILDFIRE**
11 **MITIGATION INVESTMENTS?**

12 A. Yes, in Opening Testimony AWEC noted the Pacific Gas & Electric bankruptcy, driven
13 by the catastrophic wildfires in California.^{87/} Additionally, specifically applicable to
14 PacifiCorp, the Company recently paid \$3.4 million to the U.S. Forest Service, and
15 [REDACTED] to settle claims related to the
16 2018 Ramsey Canyon Fire in Oregon.^{88/} Minimizing such costs in the future is clearly in
17 shareholders’ interest and to their benefit.

18 **Q. PACIFICORP ALSO ARGUES THAT WILDFIRES ARE BECOMING MORE**
19 **FREQUENT AND SEVERE, WHICH JUSTIFIES ITS COST RECOVERY**
20 **MECHANISM.^{89/} HOW DO YOU RESPOND?**

21 A. The increased frequency and severity of wildfires does not change the analysis of who
22 benefits from wildfire mitigation investments. Both shareholders and customers benefit
23 from these investments, and therefore both groups should assume some portion of cost

^{85/} PAC/2000, Wilding/51:1-16.

^{86/} Id. at 51:11-12.

^{87/} AWEC/100, Mullins/26:3-7.

^{88/} AWEC/501 at 7-13 (AWEC DR 124; DR 125 attachments).

^{89/} PAC/2900, Lucas/5:3-24.

responsibility. Again, under AWEC's proposal, shareholders would only bear such costs to the extent they were either determined to be imprudently incurred (as with any cost), or to the extent PacifiCorp chooses not to file a rate case and take regulatory lag.

Q. DOES AWEC HAVE AN ALTERNATIVE RECOMMENDATION ON PACIFICORP'S WILDFIRE MITIGATION COST RECOVERY MECHANISM?

A. If the Commission disagrees with AWEC that these costs should be recovered through the normal rate case process and believes some type of special recovery mechanism should apply to these costs, then AWEC recommends that the Commission only allow for recovery of these costs subject to an earnings test. Given the shareholder benefits from reducing the risk for wildfires, the Commission should at a minimum ensure that recovery of these costs does not tilt the Company's overall return beyond what the Commission determines to be a fair and reasonable return.

Q. WHAT EARNINGS TEST DOES AWEC RECOMMEND?

A. AWEC recommends that recovery only be allowed up to the point that PacifiCorp's earned equity return is 100 basis points below its authorized return. This is fair because regulation only ensures the Company the opportunity to earn its authorized return, not a guarantee. Earnings within 100 basis points of the authorized ROE are within the range of reasonableness.

IX. COAL DECOMMISSIONING COSTS

Q. PLEASE SUMMARIZE THIS ISSUE.

A. Over a year into PacifiCorp's Depreciation docket, UM 1968, PacifiCorp filed revised decommissioning reports that substantially increased decommissioning costs ("Kiewit Report). I reviewed the Kiewit Report and found little to no factual basis supporting the analysis. The Commission's independent evaluator offered a similar finding and noted

1 that the estimates were abnormally high. I recommended that the originally filed
2 depreciation costs be used in rates. I also offered, as an alternative, line item adjustments
3 to the Kiewit Report.

4 PacifiCorp's reply testimony did not provide any additional documentation or
5 support for the Kiewit Report. PacifiCorp's reply failed to respond to many of the issues
6 that I raised with the report. I maintain my Opening Testimony recommendations.

7 **Q. DID PACIFICORP PROVIDE AN EXPLANATION FOR WHY THE KIEWIT**
8 **REPORT IS NOT TRANSPARENT?**

9 A. Yes. In reply testimony, PacifiCorp states Kiewit is "unwilling to share its proprietary
10 information because of competitive concerns."^{90/} PacifiCorp should be familiar with
11 Commission expectations regarding transparency and could have set clear transparency
12 expectations through its contracting process for the decommissioning report. AWEC
13 directly asked PacifiCorp why they did not include such a provision in the RFP or
14 contract for the IE and PacifiCorp declined to respond.^{91/}

15 **Q. HOW DOES PACIFICORP RESPOND TO YOUR CONCERNS REGARDING**
16 **THE STUDY?**

17 A. PacifiCorp responds generically, stating "AWEC's various recommendations are not
18 specific and are unsupported." This statement is more applicable to the Kiewit Report and
19 PacifiCorp's reply testimony than it is to AWEC. PacifiCorp should bear the burden of
20 demonstrating that the decommissioning study is supported.

21 PacifiCorp only provides specific response to some of AWEC's proposed
22 adjustments, and these responses are unsupported. For example, PacifiCorp argues that
23 reducing coal pile excavation from 10 feet to 5 feet does not necessarily reduce the

^{90/} PAC/2400, Van Engelenhoven/13

^{91/} AWEC/501 at 23 (Response to AWEC Data Request 140).

1 associated line item cost by half.^{92/} However, PacifiCorp offers no alternative method or
2 calculation.^{93/} PacifiCorp also provides no explanation for why AWEC's proposed
3 adjustment is not a reasonable approximation of the cost of excavating to five feet or
4 whether PacifiCorp thinks the cost is more or less than half of the ten foot depth.

5 PacifiCorp dismisses my adjustment to materials and supplies,^{94/} but goes on to
6 acknowledge that materials and supplies can be repurposed to other facilities.^{95/}

7 I noted three line-items for hazardous material and removed all of one line, and 25
8 percent of a second line. PacifiCorp makes no attempt to justify inclusion of any of the
9 three line-items, instead alleging that I remove all hazardous material costs. PacifiCorp is
10 simply incorrect here. My recommended D&R costs include [REDACTED] million in hazardous
11 material and other ARO costs.

12 PacifiCorp argues my testimony is inconsistent because I note PacifiCorp may
13 repurpose sites, while simultaneously recognizing sites may need remediation costs.
14 PacifiCorp admits to planning to repurpose some sites.⁹⁶ However, I agree that for sites
15 that are not repurposed PacifiCorp may be obligated to perform some remediation. I
16 continue to be concerned that there is no support for the assumption that all sites are fully
17 remediated and no support for the cost of full remediation. I modify the associated
18 adjustment in my opening testimony to reduce the reclamation costs by 50 percent rather
19 than 100 percent to reflect continued uncertainty regarding site repurposing and

^{92/} PAC/2400, Van Engelenhoven/14

^{93/} AWEC/501 at 22 (Response to AWEC Data Request 139).

^{94/} PAC/2400, Van Engelenhoven/14

^{95/} AWEC/501 at 24 (Response to AWEC Data Request 141).

^{96/} AWEC/501 at 6, 26 (Response to AWEC Data Request 61 and 143).

ambiguity about how remediation costs were calculated. The figure below summarizes this adjustment and Exhibit AWEC/503 contains my revised calculations.

Figure 2: Opening and Reply Kiewit Adjustment

	Total Cost (excl. Other Items)	\$/kW
Kiewit Total		
Opening Adj Kiewit Total	\$262,604,193	46.53
Reply Adj Kiewit Total	\$325,592,765	57.70
Filed Total	\$258,615,977	45.83

PacifiCorp alleges that my adjustments are not consistent across facilities.

However, when asked to clarify, PacifiCorp did not identify a single example of an AWEC D&R adjustment that differed across facilities.^{97/} AWEC's adjustments do have some variation across facilities, but only to the extent that the Kiewit Report cost items varied across facilities and an adjustment to such cost items did not apply to all facilities.

PacifiCorp argues that because water rights cannot be sold or transferred, the associated pumping assets must be removed. However,

^{98/}

Q. ARE THERE MAJOR AWEC D&R ADJUSTMENTS THAT PACIFICORP FAILED TO ADDRESS?

A. Yes. PacifiCorp has no response to my adjustments to owner costs, demolition expense, ARO estimate bias, general liabilities and mine closure costs.

^{97/} AWEC/501 at 25 (Response to AWEC Data Request 142).

^{98/} AWEC/501 at 1 (Response to AWEC Data Request 8, Highly Confidential conference call).

1 **Q. IS AWEC'S RECOMMENDATION TO REJECT THE KIEWIT**
2 **DECOMMISSIONING ESTIMATES FOR LACK OF EVIDENTIARY SUPPORT**
3 **INCONSISTENT WITH THE 2020 PROTOCOL, AS PACIFICORP ARGUES?**

4 A. No. PacifiCorp alleges that, because AWEC signed the 2020 Protocol, which calls for an
5 independent estimate of coal plant decommissioning costs that will be used as the basis
6 for *interjurisdictional* allocation of such costs among the states the Company serves, that
7 AWEC necessarily agreed to support inclusion of these estimated costs in Oregon rates.^{99/}
8 AWEC will respond more fully to the Company's argument in briefing, but I note that
9 PacifiCorp's position appears to be directly contradicted by the plain language of the
10 2020 Protocol. Section 4.3.1.3 states:

11 No Party will be bound by the Decommissioning Cost estimates in the
12 Decommissioning Studies undertaken pursuant to Paragraphs 4.3.1.1 and
13 4.3.1.2 and final determination of each State's just and reasonable
14 Decommissioning Costs allocation for each coal-fueled Interim Period
15 Resource will remain exclusively with each Commission and will be
16 determined in the depreciation dockets in which the Decommissioning
17 Costs are included.

18 My understanding of this provision is that it does not commit the Commission or any
19 party to support any particular decommissioning cost estimate in state proceedings, and
20 that establishment of a just and reasonable level of decommissioning costs to include in
21 Oregon rates is within the Commission's discretion, subject to the standard evidentiary
22 requirements of a contested case. My testimony position that the Kiewit estimates should
23 not be relied upon to establish Oregon's decommissioning costs responsibility is based on
24 this interpretation, which is shared by Commission Staff.^{100/}

^{99/} PAC/2400, Van Engelenhoven/10:13-13:10.
^{100/} Staff/1700, Storm/37:1-16.

**Q. WHAT ARE CUB’S AND STAFF’S POSITIONS ON THE KIEWIT
DECOMMISSIONING STUDY?**

A. Both Staff and CUB are largely aligned with AWEC and the IE. They both express frustration at the lack of supporting data from the Kiewit Report. CUB testifies that “[u]nder the current circumstances, the Kiewit Report cannot be used as the basis of cost recovery for decommissioning” and recommends as an alternative “that decommissioning cost recovery should continue to be based on the numbers from the PacifiCorp depreciation study.”^{101/} Similarly, Staff testifies that “it is not prudent to rely on the unverified basis of a study, rather than ensure the underlying analysis has been reviewed and found to be sound.”^{102/} Consequently, Staff also recommends that decommissioning costs be based on the levels identified in PacifiCorp’s depreciation study.^{103/} AWEC agrees with Staff and CUB on these points. Staff also, however, offers an alternative recommendation to “[a]llow PacifiCorp to make a filing subsequent to the rate-effective date in this proceeding to determine whether the decommissioning costs set in UE 374 should be adjusted.”^{104/} CUB also identifies the potential for additional process on decommissioning costs: “further proceedings in this docket or an entirely new investigation might be required.”^{105/}

**Q. WHAT IS AWEC’S POSITION ON STAFF’S AND CUB’S ALTERNATIVE
RECOMMENDATIONS FOR MORE PROCESS ON DECOMMISSIONING
COSTS?**

A. AWEC is not opposed to these recommendations *per se*. However, both Staff’s and CUB’s alternative recommendations require substantially more development. Under

^{101/} CUB/300, Jenks/7:20-23.

^{102/} Staff/1700, Storm/30:2-4.

^{103/} Staff/1700, Storm/37:4-6.

^{104/} *Id.* at 37:7-9.

^{105/} CUB/300, Jenks/8:7-8.

1 Staff's proposal, AWEC is unclear what filing PacifiCorp would make that would
2 provide the Commission with additional evidence to determine a just and reasonable level
3 of decommissioning costs. Similarly, the Commission should not open a new
4 investigation unless it knows it will have additional evidence not available in this
5 proceeding that will help inform a reasonable level of decommissioning costs.

6 This reveals a structural problem. Conceivably, evidence in a subsequent
7 investigation could come in the form of an updated decommissioning study that is
8 supported by workpapers and other necessary evidence. However, it is difficult to see
9 how PacifiCorp could support such a study to the extent the decommissioning costs differ
10 from the Kiewit Report. This is because, for better or worse, the amount of
11 decommissioning costs identified in the Kiewit Report is the amount allocated to all of
12 the states under the 2020 Protocol.^{106/} The Oregon Commission maintains exclusive
13 authority to identify whether the amount allocated to Oregon under the 2020 Protocol is
14 just and reasonable to include in Oregon rates, but whatever decision the Commission
15 makes on this issue will not change the fact that the Kiewit decommissioning estimates
16 are the 2020 Protocol decommissioning costs. This means that if the Commission holds
17 additional process to examine decommissioning costs, PacifiCorp cannot simply propose
18 a different decommissioning cost estimate, whether supported by a new study or not.
19 That will put the Company in a position of advocating for a different level of
20 decommissioning costs as just and reasonable than it has advocated for in all of its other

^{106/} 2020 Protocol §§ 4.3.1.1, 4.3.1.4 (“For coal-fueled Interim Period Resources that do not have a common operating life across all States, each Exiting State shall be allocated ... that State’s share of estimated Decommissioning Costs based on the Decommissioning Studies described in Sections 4.3.1.1 and 4.3.1.2”).

1 states. As AWEC understands the 2020 Protocol, PacifiCorp has little choice but to
2 continue to advocate for the Kiewit-determined decommissioning costs.

3 Consequently, while potentially unsatisfying, it appears that there are only three
4 options available to the Commission: select the Kiewit estimates; select the estimates
5 from PacifiCorp's depreciation study; or select an estimate between the two for which
6 there is evidentiary support. My testimony proposes adjustments to the Kiewit estimates
7 that provide evidentiary support for a "compromise" option that the Commission could
8 adopt in this proceeding. If an alternative estimate between the Kiewit Report and
9 PacifiCorp's depreciation study can be further refined with additional evidence and data,
10 then there may be value to holding additional process, but it should be known prior to
11 creating such process that this evidence is available. Otherwise, the record on this issue
12 appears to be as complete as it can be, and the Commission should make a decision in
13 this docket, giving due consideration to PacifiCorp's burden of proof.

14 X. TAM GUIDELINES

15 **Q. DOES AWEC CONTINUE TO RECOMMEND CHANGES TO THE EXISTING**
16 **TAM GUIDELINES?**

17 A. Yes. In Opening Testimony, AWEC opposed several changes PacifiCorp has proposed
18 to the existing TAM guidelines, and recommended a change of its own to require
19 PacifiCorp to provide all workpapers supporting its opening testimony in the TAM
20 concurrently with its initial filing. In Reply Testimony, PacifiCorp responded to
21 AWEC's concerns with the Company's proposed changes. AWEC appreciates these
22 responses, particularly the Company's clarification that it does not intend to pursue rate
23 design changes in the TAM. AWEC accepts PacifiCorp's position on these issues in its
24 Reply Testimony, but continues to believe that PacifiCorp should be required to provide

1 all workpapers concurrently with its initial filing. Under the existing TAM guidelines,
2 PacifiCorp provides a set of workpapers 5 days following its initial testimony and another
3 set 15 days following its initial testimony.

4 **Q. WHY DOES PACIFICORP OPPOSE PROVIDING ALL WORKPAPERS**
5 **CONCURRENTLY WITH ITS INITIAL FILING?**

6 A. PacifiCorp states that this requirement would be overly burdensome.^{107/} It notes the
7 number of workpapers it provided in the 5-day and 15-day submissions, but it does not
8 explain why these workpapers would not already be developed concurrently with the
9 initial filing. After all, these workpapers are intended to support that filing. The only
10 workpapers PacifiCorp identifies that may need to be provided subsequent to the initial
11 filing are “four NPC sample calculations for schedule 294 ... [which] depend on the
12 completion of the baseline NPC in the concurrent filing.”^{108/} AWEC can accept a later
13 delivery date for these workpapers, but the TAM guidelines list substantially more than
14 this for delivery 15 days from the initial filing, most of which should have already been
15 developed to support the initial filing.^{109/}

16 The reality is that, while PacifiCorp identifies the burden of producing the TAM
17 workpapers, the late delivery of these workpapers substantially burdens intervenors.
18 PacifiCorp typically files the TAM on April 1. Using UE 356, PacifiCorp’s 2020 TAM,
19 as an example, Staff and intervenor testimony was due on June 10, 2019. Allowing the
20 Company an additional 15 days to file a substantial portion of its workpapers compresses
21 an already expedited process, which must conclude with a Commission order by early
22 November. With a 14-day turnaround for data requests, intervenors realistically have

^{107/} PAC/2000, Wilding/81:17-18.

^{108/} Id. at 82:3-5.

^{109/} Order No. 09-274, Appen. A at 17.

1 sufficient time for two rounds of discovery on these workpapers and less than two months
2 to analyze and draft testimony on what are often complex issues. Consequently, while
3 concurrent production of the 15-day workpapers with the initial filing may impose
4 additional burden on PacifiCorp, that incremental burden is outweighed by the public
5 interest considerations of providing Staff and intervenors more time to review these
6 workpapers and provide the Commission with well-developed adjustments.

7 **XI. ALLOCATION OF DECOMMISSIONING COSTS TO DIRECT ACCESS**

8 **Q. CUB'S OPENING TESTIMONY RECOMMENDS THAT PACIFICORP'S COAL**
9 **PLANT DECOMMISSIONING COSTS SHOULD BE NON-BYPASSABLE FOR**
10 **DIRECT ACCESS CUSTOMERS. WHAT IS AWEC'S POSITION ON THIS**
11 **RECOMMENDATION?**

12 A. AWEC does not oppose CUB's recommendation in principle, but believes this proposal
13 needs further development in Docket UM 2024. AWEC does not agree, for instance, that
14 customers who have already fully transitioned to direct access should now be subject to
15 additional decommissioning costs. These customers paid what the Commission has
16 determined to be a just and reasonable transition charge, which included
17 decommissioning costs that were included in depreciation rates – that were also deemed
18 to be just and reasonable – when they transitioned to direct access. It would be unfair to
19 these customers to retroactively modify the costs they are subject to because they may be
20 higher now than they were several years ago. Moreover, a major factor in the increase in
21 decommissioning costs is PacifiCorp's decision to accelerate closure of several coal
22 plants (thus requiring these costs to be recovered over a shorter period). This decision is
23 being made because it has been found to be a least-cost, least-risk plan to replace these
24 coal assets with lower cost renewable resources. Customers who have already
25 transitioned to direct access will receive none of the benefits of these lower cost

1 replacement resources, so it would be unfair to charge them costs related to this resource
2 strategy.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

4 A. Yes.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
UE 374**

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER,)
)
Request for a General Rate Revision.)
_____)

**EXHIBIT AWEC/501
PACIFICORP RESPONSES TO DATA REQUESTS
(REDACTED VERSION)**

UE 374/PacifiCorp
April 21, 2020
AWEC Data Request 008

AWEC Data Request 008

Please provide the following information related to water use for each PacifiCorp coal plant:

- (a) Water right certificate.
- (b) Permitted volume and uses.
- (c) Monthly volume of water use by month and year from January 2010 to present.
- (d) Options available to PacifiCorp for selling, leasing or otherwise monetizing the water rights associated with plants after closure.
- (e) All communications with third parties from 2010 to present regarding potential sale, lease or other monetization of the water rights associated with plants after closure.

Response to AWEC Data Request 008

PacifiCorp objects to this request on the grounds that it is overly broad, unduly burdensome and that it seeks information that is not relevant to, and not reasonably calculated to lead to the discovery of information relevant to, this docket. Without waiving the foregoing objections, the company responds as follows:

Any communications regarding potential sale, lease, or other monetization of water rights associated with each PacifiCorp coal plant is highly confidential and proprietary. Disclosure of PacifiCorp's assessments of economic value and opportunities, actual or potential, involving its water rights could provide economic advantage to PacifiCorp's competitors or counterparties.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
April 21, 2020
AWEC Data Request 0028

AWEC Data Request 0028

Please refer to PAC/1100 Lucas/23 to 29. Please provide the following information related to PacifiCorp's Oregon AMI project:

- (a) Rate base additions, by year and FERC account.
- (b) Rate base deductions, by FERC account.
- (c) Retirements associated with the installation of AMI meters by retirement year and vintage.
- (d) The number of Schedule 48 customers that received new meters under the Oregon AMI project.
- (e) List of all software, websites, and other IT projects associated with the Oregon AMI project and the cost of each item.
- (f) The annual revenue requirement of the Oregon AMI project.
- (g) The amount of the Oregon AMI project that is included in Schedule 48 revenue requirement.

Response to AWEC Data Request 0028

- (a) Please refer to Attachment OPUC 183-2 included with the Company's response to OPUC Data Request 183.
- (b) The projected December 2020 depreciation reserve balance for the Oregon advanced metering infrastructure (AMI) project by function and factor is in the table below. This balance has been calculated using the actual electric plant in service balances and the depreciation reserve balances as of March 2020 along with the composite depreciation rates that were included in the rate case.

Function	Factor	Total Company Amount
Distribution	OR	(6,188,896)
General	OR	(372,156)
General	SO	(3,845,439)
Intangible	CN	(7,560,067)
Intangible	SO	(710,156)
Total		(18,676,714)

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
April 21, 2020
AWEC Data Request 0028

(c) Meter retirements are not tracked by work order and therefore those directly associated with the installation of AMI meters are not identifiable. The five-year average of retirements in Oregon meters asset class 37056 prior to 2017 was \$1,322,000 per year. Based on the January 2017 through March 2020 increase over this prior average, retirements associated with the installation of AMI meters are estimated to be \$54.8 million. Please refer to Attachment AWEC 0028-1 for all Oregon meter retirements in asset class 37056 from January 2017 through March 2020 by retirement year and vintage.

(d) Zero.

(e) Please refer to the information provided below:

i. Software:

Software	\$(million)
AMI Head-End	\$1.8
IEE MDM	\$1.0
MuleSoft	\$0.1
ODS	\$0.9
OO	\$0.4
Security Monitoring Tools	\$0.1
TIBCO	\$1.1
Total	\$5.3

ii. Enhanced existing website \$0.8 million.

iii. Other information technology (IT) projects associated with Oregon AMI: California AMI – Capital \$10.6 million / OMAG \$0.2 million (situated assigned to California)

(f) Please refer to Attachment AWEC 0028-2 for annual revenue requirement of AMI projects in Oregon.

(g) Please refer to Attachment AWEC 0028-2 for annual revenue requirement of AMI projects in Oregon included in the Schedule 48 annual revenue requirement.

AWEC 0028

Oregon meter retirements in asset class 37056 from January 2017 through March 2020 by retirement year and vintage					
	Retirement Year				
Vintage	2017	2018	2019	Jan-Mar 2020	Grand Total
1958	(1,130.69)	(638.94)	-	-	(1,769.63)
1959	(1,288.46)	(1,767.29)	(6,460.75)	-	(9,516.50)
1960	(2,261.99)	(4,201.09)	(20,491.14)	-	(26,954.22)
1961	(8,344.79)	(6,761.78)	(22,850.62)	-	(37,957.19)
1962	(11,746.58)	(26,306.47)	(50,654.49)	(5,430.90)	(94,138.44)
1963	(8,004.40)	(17,418.42)	(67,054.82)	-	(92,477.64)
1964	(7,611.53)	(37,785.79)	(74,832.99)	(1,751.46)	(121,981.77)
1965	(13,067.98)	(31,563.99)	(63,158.95)	-	(107,790.92)
1966	(8,414.54)	(35,343.03)	(41,373.55)	(27.28)	(85,158.40)
1967	(6,225.62)	(37,520.48)	(41,761.30)	-	(85,507.40)
1968	(6,569.26)	(62,595.52)	(51,583.99)	-	(120,748.77)
1969	(1,939.49)	(50,780.32)	(58,754.14)	(29.56)	(111,503.51)
1970	(1,409.41)	(68,950.76)	(72,345.07)	(27.15)	(142,732.39)
1971	(3,496.20)	(116,309.55)	(138,918.37)	(661.29)	(259,385.41)
1972	(2,947.46)	(115,917.63)	(52,288.07)	(335.35)	(171,488.51)
1973	(2,487.76)	(154,426.17)	(146,891.55)	(1,147.57)	(304,953.05)
1974	(10,779.81)	(157,696.83)	(133,902.64)	(5,541.99)	(307,921.27)
1975	(9,816.04)	(191,082.36)	(132,086.98)	(1,073.62)	(334,059.00)
1976	(20,774.22)	(305,963.70)	(194,245.28)	(3,786.80)	(524,770.00)
1977	(11,719.22)	(395,767.42)	(305,998.38)	(2,861.35)	(716,346.37)
1978	(18,028.56)	(423,903.67)	(313,182.34)	(1,571.20)	(756,685.77)
1979	(8,241.39)	(370,427.26)	(266,206.87)	-	(644,875.52)
1980	(16,329.27)	(415,936.99)	(247,797.18)	(283.51)	(680,346.95)
1981	(9,794.64)	(352,680.08)	(244,739.43)	(81.69)	(607,295.84)
1982	(10,398.08)	(276,874.54)	(174,436.05)	(204.25)	(461,912.92)
1983	(9,022.87)	(235,304.12)	(223,317.09)	-	(467,644.08)
1984	(11,504.85)	(316,261.23)	(250,989.40)	(118.56)	(578,874.04)
1985	(20,340.17)	(290,746.23)	(323,548.06)	-	(634,634.46)
1986	(23,195.87)	(557,079.84)	(363,536.38)	-	(943,812.09)
1987	(19,124.01)	(678,636.40)	(401,561.44)	(630.71)	(1,099,952.56)
1988	(19,269.30)	(711,281.64)	(351,710.72)	-	(1,082,261.66)
1989	(19,521.25)	(700,790.36)	(476,500.70)	(88.27)	(1,196,900.58)
1990	(21,070.82)	(682,867.13)	(697,929.12)	(556.34)	(1,402,423.41)
1991	(27,450.76)	(938,931.18)	(905,981.84)	(225.36)	(1,872,589.14)
1992	(24,950.12)	(756,077.12)	(666,184.45)	(7,261.72)	(1,454,473.41)
1993	(16,794.71)	(727,160.14)	(486,884.14)	(4,065.09)	(1,234,904.08)
1994	(38,244.71)	(830,664.90)	(533,775.97)	(1,441.48)	(1,404,127.06)
1995	(102,436.72)	(1,127,927.55)	(1,140,726.82)	(649.89)	(2,371,740.98)
1996	(22,302.09)	(579,039.55)	(246,102.78)	(836.70)	(848,281.12)
1997	(47,290.04)	(1,577,464.80)	(1,639,047.85)	(12,585.96)	(3,276,388.65)
1998	(42,061.35)	(1,301,373.64)	(726,463.06)	(1,803.72)	(2,071,701.77)
1999	(25,135.70)	(300,902.66)	(93,318.77)	-	(419,357.13)
2000	(42,072.25)	(767,119.74)	(342,088.44)	(1,233.06)	(1,152,513.49)
2001	(53,392.73)	(225,451.14)	(385,086.51)	(254.89)	(664,185.27)

AWEC 0028

Oregon meter retirements in asset class 37056 from January 2017 through March 2020 by retirement year and vintage					
	Retirement Year				
Vintage	2017	2018	2019	Jan-Mar 2020	Grand Total
2002	(50,341.20)	(705,400.90)	(945,430.26)	(1,355.75)	(1,702,528.11)
2003	(59,962.73)	(926,827.79)	(373,121.93)	-	(1,359,912.45)
2004	(77,831.31)	(1,174,408.42)	(561,641.48)	(1,563.06)	(1,815,444.27)
2005	(147,547.93)	(1,220,558.08)	(880,415.74)	-	(2,248,521.75)
2006	(102,998.67)	(1,207,561.54)	(901,807.38)	-	(2,212,367.59)
2007	(195,569.79)	(988,147.66)	(594,796.02)	-	(1,778,513.47)
2008	(108,090.38)	(1,078,093.29)	(880,955.96)	-	(2,067,139.63)
2009	(164,026.19)	(676,882.20)	(412,952.57)	-	(1,253,860.96)
2010	(156,747.64)	(600,194.71)	(378,945.84)	-	(1,135,888.19)
2011	(149,859.29)	(559,396.92)	(526,338.20)	(163.12)	(1,235,757.53)
2012	(113,508.73)	(682,667.29)	(478,264.92)	(193.49)	(1,274,634.43)
2013	(97,840.87)	(917,634.09)	(521,954.55)	-	(1,537,429.51)
2014	(74,746.60)	(1,107,727.50)	(674,981.53)	(842.27)	(1,858,297.90)
2015	(89,224.51)	(1,570,510.50)	(950,376.69)	(8,795.68)	(2,618,907.38)
2016	(74,389.93)	(744,136.47)	(452,272.72)	-	(1,270,799.12)
2017	(143.33)	(659,668.05)	(820,017.77)	(3,163.51)	(1,482,992.66)
2018	-	-	(943,729.86)	(240,960.59)	(1,184,690.45)
2019	-	-	(30,551.96)	-	(30,551.96)
2020	-	-	-	(107.08)	(107.08)
Grand Total	(2,450,836.81)	(31,783,514.86)	(24,505,323.87)	(313,711.27)	(59,053,386.81)

UE 374/PacifiCorp
May 13, 2020
AWEC Data Request 0061

AWEC Data Request 0061

Has PAC considered using any of the following sites for replacement generation or repowering? If yes, for each site explain why PAC considered replacement generation, identify the types of potential replacement generation, and indicate whether replacement generation requires reclaiming the site to greenfield status with topsoil and vegetation.

- (a) Hunter
- (b) Huntington
- (c) Dave Johnson
- (d) Jim Bridger
- (e) Naughton
- (f) Wyodak
- (g) Hayden
- (h) Colstrip

Response to AWEC Data Request 0061

PacifiCorp has reviewed the potential for construction of new power generation on some PacifiCorp owned properties including at least one coal-fueled generating facility. Opportunities to repurpose generating facilities will be considered as part of preparing for the actual demolition of each individual generating facility. Opportunities to use or repurpose PacifiCorp owned properties are considered as PacifiCorp prepares for development of new generating resources. Repurposing of partner operated generating facilities will be determined by the operating partner, PacifiCorp and the other owners.

The nature and extent of actual site reclamation will depend on whether the site is repurposed and the nature of the repurposing. Consistent with the Design Basis, provided in the Company's response to AWEC Data Request 0057, specifically Confidential Attachment AWEC 0057, the study did not include bringing the sites to a greenfield condition as removal of some portion of foundations, underground piping and underground utilities were not included in the study. Generating facilities probably will not be brought to a greenfield condition when sites are actually demolished due to the high cost and limited benefit.

UE 374/PacifiCorp
July 13, 2020
AWEC Data Request 0124

AWEC Data Request 0124

Please admit that the Company has agreed to pay \$3.4 million to settle claims by the United States Department of Justice related to the 2018 Ramsey Canyon Fire. If the Response is anything other than an unqualified admission, please detail the facts supporting this Response.

Response to AWEC Data Request 0124

Confirmed.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
July 13, 2020
AWEC Data Request 0125

AWEC Data Request 0125

Please provide all documents related to any claims for damages or other liability made by the United States Department of Justice, the United States Bureau of Land Management or other United States Federal agency, the State of Oregon, and/or any county or local government or agency of the State of Oregon against the Company related to the 2018 Ramsey Canyon Fire.

Response to AWEC Data Request 0125

Please refer to Attachment AWEC 0125.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

SETTLEMENT AGREEMENT

This Settlement Agreement (“Agreement”) is entered into between the United States of America, acting through the United States Department of Justice and on behalf of the United States Department of Agriculture, Forest Service (“Forest Service”), and the United States Department of the Interior, Bureau of Land Management (“BLM”) (collectively the “United States”), and PacifiCorp through their authorized representatives.

RECITALS

A. Defendant PacifiCorp is an Oregon Corporation with its principal place of business in Portland, Oregon. PacifiCorp, including its subsidiaries, is an electric utility which provides electricity to several states, including Oregon. PacifiCorp has a utility right-of-way on BLM land on which PacifiCorp owns and operates the Dixonville-to-Meridian 500kV transmission line in Douglas County and Jackson County, Oregon (the “Line”).

B. The United States represents and enters into this agreement on behalf of itself, Forest Service, BLM, and each of its agencies that incurred damages related to a fire that ignited on August 22, 2018 in Jackson County about 12 miles northwest of Eagle Point, Oregon known as the Ramsey Canyon Fire (the “Fire”). Fire investigators determined that the Fire ignited near the base of PacifiCorp Structure 3/51 on the Line (the “Structure”). The Fire burned approximately 1,888 acres of federal, state, and private land, including 930 acres of BLM-managed land. The Fire caused the United States to incur suppression costs and to suffer resource damages in the total amount of \$4,825,345.31.

C. The United States contends that the Fire was caused by the failure of a connector on the Structure and that it has certain civil claims arising from the Fire, including that PacifiCorp failed to properly install, inspect, and maintain the Structure, which resulted in the Fire. This conduct is referred to below as the Covered Conduct.

D. PacifiCorp denies the United States’ allegations in Paragraph C.

E. This Agreement is neither an admission of liability by PacifiCorp nor a concession by the United States that its claims are not well founded.

To avoid the delay, uncertainty, inconvenience, and expense of protracted litigation of the above claims, and in consideration of the mutual promises and obligations of this Agreement, the Parties agree and covenant as follows:

TERMS AND CONDITIONS

1. PacifiCorp shall pay to the United States \$3,400,000 (the “Settlement Amount”), of which \$3,400,000 is restitution, by electronic funds transfer, pursuant to written instructions to

be provided, to the Office of the United States Attorney for the District of Oregon no later than ten calendar days after the Effective Date of this Agreement.

2. Subject to the exceptions in Paragraph 3 (concerning excluded claims) below, and conditioned upon PacifiCorp's full payment of the Settlement Amount, the United States releases PacifiCorp together with its current and former parent corporations; direct and indirect subsidiaries; brother or sister corporations; divisions; current or former corporate owners; and the corporate successors and assigns of any of them from any civil or administrative monetary claim the United States has for the Covered Conduct under all statutory or common law authority, including all expenses, costs, and attorneys' fees, and from damages of every kind, nature, or basis, known as well as unknown, anticipated or unanticipated, now existing or hereinafter arising, based upon any theory of recovery, arising out of, related to, or in any way caused by the Covered Conduct.

3. Notwithstanding the release given in paragraph 2 of this Agreement, or any other term of this Agreement, the following claims of the United States are specifically reserved and are not released:

- a. Any liability arising under Title 26, U.S. Code (Internal Revenue Code);
- b. Any criminal liability;
- c. Except as explicitly stated in this Agreement, any administrative liability, including the suspension and debarment rights of any federal agency;
- d. Any liability to the United States (or its agencies) for any conduct other than the Covered Conduct;
- e. Any liability based upon obligations created by this Agreement; and
- f. Any liability of individuals.

4. PacifiCorp fully and finally releases the United States, its agencies, officers, agents, employees, and servants, from any claims (including attorney's fees, costs, and expenses of every kind and however denominated) that PacifiCorp has asserted, could have asserted, or may assert in the future against the United States, its agencies, officers, agents, employees, and servants, related to the Covered Conduct and the United States' investigation and prosecution thereof.

5. This Agreement is intended to be for the benefit of the United States and PacifiCorp only.

6. Each Party shall bear its own legal and other costs incurred in connection with this matter, including the preparation and performance of this Agreement.

7. Each Party and signatory to this Agreement represents that it freely and voluntarily enters in to this Agreement without any degree of duress or compulsion.

8. This Agreement is governed by the laws of the United States. The exclusive jurisdiction and venue for any dispute relating to this Agreement is the United States District Court for the District of Oregon. For purposes of construing this Agreement, this Agreement shall be deemed to have been drafted by all Parties to this Agreement and shall not, therefore, be construed against any Party for that reason in any subsequent dispute.

9. This Agreement constitutes the complete agreement between the Parties. This Agreement may not be amended except by written consent of the Parties.

10. The undersigned counsel represent and warrant that they are fully authorized to execute this Agreement on behalf of the persons and entities indicated below.

11. This Agreement may be executed in counterparts, each of which constitutes an original and all of which constitute one and the same Agreement.


12. This Agreement is binding on PacifiCorp's successors, transferees, heirs, and assigns.

13. All parties consent to the United States' disclosure of this Agreement, and information about this Agreement, to the public.

14. This Agreement is effective on the date of signature of the last signatory to the Agreement ("Effective Date of this Agreement"). Images of ink signatures (such as a photocopy, fax, or scanned image) shall constitute acceptable, binding signatures for purposes of this Agreement.


THE UNITED STATES OF AMERICA

DATED: 10/9/20


BY: 
Carla G. McClurg
Assistant United States Attorney
District of Oregon

PACIFICORP

DATED: 06/09/2020

BY: 
Ryan Flynn
Chief Legal Officer, PacifiCorp

DATED: 06/09/2020

BY: 
Bret Reich
Counsel for PacifiCorp

MUTUAL RELEASE IN FULL OF ALL CLAIMS
(Ramsey Canyon Fire)

For the consideration of this Mutual Release in Full of All Claims (“Mutual Release”) and the payment of THREE MILLION DOLLARS (\$3,000,000.00) by PacifiCorp to the Oregon Department of Forestry (“Forestry”), Forestry does hereby release, acquit and forever discharge PacifiCorp, together with its successors, employees, attorneys, investigators and subcontractors of and from any and all claims, demands, actions or causes of action of every nature whatsoever arising out of the fire known as the Ramsey Canyon Fire and the resulting fire suppression efforts, that occurred on or about August 22, 2018, in Jackson County, Oregon (the “Fire”). PacifiCorp does not admit liability for the Fire and it expressly denies liability, of and from any and all claims, demands, actions or causes of action of every nature whatsoever arising out of the Fire.

Forestry does not release any claims that it may have under the Oregon Forest Practices Act (ORS 527.610 *et seq.*). This Mutual Release only applies to claims belonging to Forestry. It does not release any claims, demands, actions or causes of action whatsoever belonging to any other agency, department or instrumentality of the State of Oregon.

For the sole consideration of this Mutual Release, PacifiCorp does hereby release, acquit and forever discharge Forestry, and its successors, employees, attorneys, investigators and subcontractors; none of whom admit liability but each of whom expressly denies liability, of and from any and all claims, demands, actions or causes of action of every nature whatsoever arising out of the Fire.

Forestry and PacifiCorp also expressly understand and agree that this Mutual Release is intended to cover all known injuries, losses and damages, and any further injuries, losses and damages not now known or anticipated, but which may later develop or be discovered, including all the effects and consequences thereof arising from or related to the Fire.

Forestry and PacifiCorp stipulate, agree and covenant that they will not further sue or seek additional relief from each other for any loss or damage in any way connected with the Fire.

Forestry and PacifiCorp expressly understand that this Mutual Release and PacifiCorp’s payment of THREE MILLION DOLLARS (\$3,000,000.00) to Forestry are the sole and exclusive consideration received by the undersigned for the release of the parties named herein.

The undersigned declare that they have read this Mutual Release, that it is fully understood and voluntarily accepted for the purpose of making a full, final and complete settlement and compromise of any and all claims arising out of the Fire, in whatever legal form or theory they might be asserted between the parties to this release.

Forestry and PacifiCorp agree that this Mutual Release contains all of the terms of their agreement. The terms of this Mutual Release are contractual and are not a mere recital. This Mutual Release shall not be construed against the drafting party.

The persons executing and delivering this Mutual Release on behalf of the parties represent and warrant they are duly authorized to do so and that the execution of this Mutual Release is both a lawful and a voluntary act of the parties.

This Mutual Release may be signed in multiple counterparts, which together will be one and the same instrument. This Mutual Release may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original, manual signature. Without limitation, “electronic signature” shall include faxed

versions of an original signature or electronically scanned and transmitted versions of an original signature or any symbol adopted by either party with the intent to sign this Mutual Release.

EACH OF THE UNDERSIGNED HAS READ THE FOREGOING RELEASE, FULLY UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS.

Department of Forestry

s/ Tim Holschbach

By: Tim Holschbach 06/03/2020
Fire Prevention and Policy Manager
Oregon Department of Forestry
2600 State Street, Building D
Salem, OR 97310
503-945-7434
Tim.J.Holschbach@Oregon.gov
Authorized Representative for the Oregon Department of Forestry

PacifiCorp

s/ Ryan Flynn

Ryan Flynn, OSB #025304 06/05/2020
Chief Legal Officer, Pacific Power General Counsel
825 NE Multnomah St., Ste. 2000, Portland OR 97232
503 813-6321 | ryan.flynn@pacificorp.com
Authorized Representative for PacifiCorp

APPROVED AS TO FORM:

s/ Timothy D. Smith

Timothy D. Smith, OSB # 914374 06/03/2020
Senior Assistant Attorney General
Oregon Department of Justice | Civil Recovery Section
100 SW Market St, Portland OR 97201
503 934-4452 | tim.smith@doj.state.or.us
Attorney for the State of Oregon, Dept. of Forestry

s/ Bret Reich

06/08/2020

Bret Reich Date
Attorney for PacifiCorp

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0130

AWEC Data Request 0130

Please refer to the following article: “PacifiCorp, DEQ pick less power over clean-coal technology,” Thuermer Jr., Angus M., WYOFIELD (Sept. 3, 2019). Available here: <https://www.wyofile.com/pacificcorp-deq-pick-less-power-over-clean-coal-technology/>)

- (a) Does PAC believe that regional haze requirements can be met through reduced generation of Jim Bridger as discussed in the referenced article? If no, why not? If yes, why?
- (b) When did PacifiCorp first consider lower generation at Jim Bridger as a way to meet regional haze requirements?
- (c) Did PacifiCorp model reduced generation of Jim Bridger as a way to meet regional haze requirements in the 2013 IRP? If no, why not?

Response to AWEC Data Request 0130

- (a) PacifiCorp submitted an application to Wyoming on February 5, 2019 proposing the use of emission limits for compliance with regional haze requirements at Jim Bridger. On May 5, 2020, Wyoming issued a permit which approved the emission limits proposed by PacifiCorp. The application and the permit are publicly available and can be accessed by utilizing the following website link:

<https://openair.wyo.gov>
- (b) PacifiCorp first proposed the use of emission limits for compliance with regional haze requirements at Jim Bridger on February 5, 2019. Preparation of PacifiCorp’s application took place in 2018 and early 2019.
- (c) No. Please refer to the Company’s responses to subpart (a) and (b), above.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0132

AWEC Data Request 0132

Please refer to PAC/2300, Link/15. At any time prior to January 1, 2014, did PacifiCorp communicate with any state or federal air quality organization about the following options alone or in combination as potential regional haze compliance options? If yes, identify which options were discussed and provide nature and outcome of the communication.

- (a) Early retirement of one or more units of Jim Bridger in 2023.
- (b) Early retirement of one or more units of Jim Bridger in 2024.
- (c) Early retirement of one or more units of Jim Bridger in 2025.
- (d) Gas conversion of one or more units of Jim Bridger in 2024.
- (e) Gas conversion of one or more units of Jim Bridger in 2025.
- (f) Reduced generation of one or more units of Jim Bridger.
- (g) Reduced generation of one or more units of Hunter.
- (h) Reduced generation of one or more units of Huntington.
- (i) Early retirement of one or more units of Hunter.

Response to AWEC Data Request 0132

PacifiCorp was unable to locate any records of communications with any state or federal air quality organization prior to January 1, 2014 regarding the items listed in subparts (a) through (i) of this data request. To the extent they occurred, records of all communications between PacifiCorp and state and federal agencies are public information and are available through public information requests to the agencies.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0133

AWEC Data Request 0133

Please refer to PAC/2300 Link/50.

- (a) Please provide PacifiCorp's Bridger Coal Company coal price forecast in dollars per MMBTU from each forecast produced in 2003 through 2013, including but not limited to business plan forecasts, IRP forecasts, and net power cost forecasts.
- (b) Please provide PacifiCorp's actual Bridger Coal Company coal price forecast in dollars per MMBTU from each forecast produced in 2003 through 2013.

Response to AWEC Data Request 0133

PacifiCorp objects to this data request as overly burdensome, outside the scope of the proceeding and unlikely to lead to the discovery of admissible evidence. Without waiving this objection, the Company responds as follows:

- (a) Please refer to Confidential Attachment AWEC 0133 which provides PacifiCorp's Bridger Coal Company (BCC) 10-year business plan forecasts, integrated resource plan (IRP) forecasts, and net power costs (NPC) forecasts produced in 2011 through 2013, in dollars per million British thermal units (\$/MMBtu).
- (b) Please refer to the Company's response to subpart (a) above for the actual BCC coal price forecasts.

Confidential information is designated as Protected Information under the protective order in this proceeding and may only be disclosed to qualified persons as defined in that order..

Page 17 of Exhibit AWEC/501 contains Protected Information Subject to Order No. 20-040 and has been redacted in its entirety.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0134

AWEC Data Request 0134

Please refer to PAC/2300 Link/31.

- (a) Please provide PacifiCorp's basis for concluding that the economic life of Jim Bridger was 2037 in the 2013 IRP. Please provide all supporting documentation and work papers.
- (b) In the 2013 IRP, did PacifiCorp consider the possibility that the economic life of Jim Bridger, under an SCR installation scenario, would be something other than 2037? If yes, please provide all supporting documentation and work papers.
- (c) Has PacifiCorp calculated the PVRR(d) of SCR and alternative compliance scenarios for Jim Bridger 3 and 4 under an assumed economic life of 2025? If no, why not?

Response to AWEC Data Request 0134

- (a) The basis for the 2037 economic life of Jim Bridger, as utilized in PacifiCorp's 2013 Integrated Resource Plan (IRP), was the Company's Depreciation Study based on assumed depreciable lives of Company-owned resources filed in each state, except Oregon. Please refer to Attachment AWEC 0134 which provides a copy of Exhibit RMP__(KIA-1) from Docket 13-035-02 in Utah (Depreciation Study). Note: the IRP used the assumed depreciable lives, rather than accelerated coal lives, as filed in the equivalent Oregon Depreciation Study (Docket UM-1647, consistent with Order 08-327 in Docket UM-1329).
- (b) No. In PacifiCorp's 2013 IRP, under a selective catalytic reduction (SCR) installation, the economic life of Jim Bridger was 2037. The SCR investment was considered to enable Jim Bridger to run to the end of its economic life.
- (c) The Company has not performed an analysis assuming Jim Bridger Unit 3 and Jim Bridger Unit 4 would retire at the end of 2025. The Company did analyze how the economic analysis is affected assuming a 2025 depreciable life. Please refer to Mr. Link's reply testimony at page 31 line 1 through page 32 line 2.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0135

AWEC Data Request 0135

Please refer to PAC/2300 Link/32. Please provide the following data related to Docket UE 307:

- (a) All discovery requests, responses, and attachments related to coal prices, coal contracts, and coal capital investments.
- (b) All confidential and highly confidential exhibits and transcripts.
- (c) All Jim Bridger long term fuel plans.

Response to AWEC Data Request 0135

- (a) PacifiCorp objects to this data request as overly broad, unduly burdensome, and unlikely to lead to the discovery of admissible evidence. Without waiving this objection, the Company responds as follows:

Please refer to Attachment AWEC 0135-1 and Confidential Attachment AWEC 0135-2 which provides copies of all incoming data requests received by PacifiCorp submitted in docket UE 307 (the 2017 Transition Adjustment Mechanism (TAM) proceeding). The Company requests that the Alliance of Western Energy Consumers (AWEC) identify the specific data requests from docket UE 307 that AWEC would like the received the responses to.

- (b) PacifiCorp objects to this data request as overly broad, unduly burdensome, and unlikely to lead to the discovery of admissible evidence. Without waiving this objection, PacifiCorp agrees that AWEC can reference, include in testimony, or provide as an exhibit confidential and highly confidential exhibits and transcripts from docket UE 307, if first introduced as confidential or highly confidential per the protective order and modified protective order in the current proceeding, docket UE 374.
- (c) PacifiCorp objects to this data request as overly broad, unduly burdensome, and unlikely to lead to the discovery of admissible evidence. Without waiving this objection, PacifiCorp agrees that AWEC can reference, include in testimony, or provide as an exhibit Jim Bridger long-term fuel plans from docket UE 307, if first introduced as confidential or highly confidential per the protective order and modified protective order in the current proceeding, docket UE 374.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0135

Confidential information is designated as Protected Information under the protective order in this proceeding and may only be disclosed to qualified persons as defined in that order.

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UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0138

AWEC Data Request 0138

Please refer to PAC/2300, Link/49, lines 13 to 17.

- (a) Please provide PacifiCorp's estimate of the PVRR(d) values in PacifiCorp 2013 IRP Tables V3.3, V3.4, and V3.5 under a 2029 retirement date for Hunter 1 in the operate as coal scenario. Please provide the basis for this estimate and all supporting work papers. If PacifiCorp declines to provide such data, please provide the basis for Mr. Link's certainty.
- (b) Is Mr. Link certain that a 2029 retirement date for Hunter 1 under the operate as coal scenario would result in a PVRR(d) net benefit for the operate as coal scenario? If yes, please provide all supporting analysis and documentation.

Response to AWEC Data Request 0138

- (a) Referencing PacifiCorp's 2013 Integrated Resource Plan (IRP), the Company has not prepared the requested analysis to update Table V3.3 (Hunter 1 Emission Control PVRR(d) Analysis Results, 2026 SCR), Table V3.4 (Table V3.4 – Hunter 1 Emission Control PVRR(d) Analysis Results, 2018 SCR), and / or Table V3.5 (Table V3.5 – Hunter 1 APR Emission Control PVRR(d) Analysis Results, 2026 SCR) under a 2029 retirement date.
- (b) Please refer to the Company's response to subpart (a) above.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0139

AWEC Data Request 0139

Please refer to PAC/2400, Van Engelenhoven/14, lines 17 to 19. Please provide PacifiCorp's estimate of the cost of reducing excavation depth by half. Please include supporting work papers.

Response to AWEC Data Request 0139

The work to identify the excavation depth has not been completed.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0140

AWEC Data Request 0140

Please refer to PAC/2400, Van Engelenhoven/13, line 1. Given PacifiCorp's expectation that an independent evaluator, state commissions, and intervenors would likely need to review the decommissioning study analysis, did PacifiCorp include in its RFP or contract for the decommissioning study a requirement that all calculations, assumptions, and work papers be made available for review? If no, why not? If yes, please provide such documents.

Response to AWEC Data Request 0140

Assumptions made by the consultant and contractors are included in the reports and the design basis. Calculations and work papers were not included as deliverables in the request for proposals (RFP) for the demolition studies. The processes, calculations, work papers and information sources used by consultants and subcontractors for these types of studies are typically proprietary, confidential, intellectual property and trade secrets. Consultants and subcontractors typically consider this information to be essential to maintaining their competitive position.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0141

AWEC Data Request 0141

Please refer to PAC/2400, Van Engelenhoven/14, lines 20 to 21. Can material, supplies, rolling stock, or railcars be used elsewhere in PacifiCorp's system? If no, why not?

Response to AWEC Data Request 0141

The small portion of materials and supplies (M&S) that are consumables may be usable at a generating facility that is not being decommissioned. The majority of the M&S are specific to the equipment at the generating facility that will be decommissioned. These M&S are not usable at a generating facility that will continue operation.

Generating facilities typically have all of the rolling stock needed to operate each generating facility based on the design, equipment and needs of each individual facility. Generating facilities that are not decommissioned will have little or no need or use for additional rolling stock. Transferring unneeded rolling stock to a generating facility will increase operating costs.

Company-owned railcars are only used at the Jim Bridger generating facility. No other PacifiCorp generating facility has a need or use for railcars.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0142

AWEC Data Request 0142

Please refer to PAC/2400, Van Engelenhoven/15, lines 13 to 15. Please explain how AWEC's adjustments are not consistent across all facilities.

Response to AWEC Data Request 0142

PacifiCorp attempted to apply a consistent design basis to the estimates for all the facilities included in the study. Alliance of Western Energy Consumers (AWEC) chose to recommend adjustments for certain categories without providing a basis for the recommendation. This would allow AWEC to pick and choose adjustments based on AWEC's sole judgement and appeared to be inconsistent with the intent of the study and the process that was applied.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0143

AWEC Data Request 0143

Please refer to PAC/2400, Van Engelenhoven/16. If PacifiCorp builds replacement generation at a previous coal site, will PacifiCorp continue to use some or all of the site's pumping facilities. If no, why not?

Response to AWEC Data Request 0143

No, PacifiCorp does not foresee the continued use of facilities for the pumping of process cooling water at any the generating facilities included in the demolition study. Integrated resource planning (IRP) indicates that future generating facilities will be made up largely of wind and solar resources. A small amount of generation several years in the future is expected to be natural gas-fueled firming or peaking power. Wind and solar generating resources do not require process cooling water. Firming and peaking generating resources require little or no process cooling water. The elevation of most of the coal-fueled generating facilities is too high to be effective for natural gas-fueled firming or peaking generating facilities. In the unlikely event natural gas-fueled firming or peaking require process cooling water the existing pumping facilities will be an order of magnitude larger than needed. Operating pumping facilities that are significantly oversized would be cost prohibitive. No currently foreseeable case justify the continued use of the existing process cooling water pumping facilities after demolition of the associated coal-fueled generating facilities.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0144

AWEC Data Request 0144

Please refer to PacifiCorp's Response to AWEC Data Request 114. Please provide the Bridger Coal Company coal costs in \$ per MMBTU used in the 2013 and 2019 IRP for each PaR scenario. If PacifiCorp declines to provide this data, please provide such information for the coal price in \$ per MMBTU for the base gas, base CO₂ PaR scenarios.

Response to AWEC Data Request 0144

Please refer to Confidential Attachment AWEC 0144 for the component cash coal price in dollars per million British thermal units (\$/MMBtu) for the base gas and base CO₂ planning and risk (PaR) model scenarios for PacifiCorp's 2019 Integrated Resource Plan (IRP) and 2013 IRP for the Bridger Coal Company (BCC).

The BCC cash price excludes non-cash expenses including depreciation, depletion, and coal inventory adjustments. In addition, for the 2019 IRP, reclamation contributions to the trust fund were excluded and the Bridger mine is closed at the end of 2028 versus Bridger mine closure in 2037 in the 2013 IRP.

Confidential information is designated as Protected Information under the protective order in this proceeding and may only be disclosed to qualified persons as defined in that order.

Page 28 of Exhibit AWEC/501 contains Protected Information Subject to Order No. 20-040 and has been redacted in its entirety.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0145

AWEC Data Request 0145

Please refer to PAC/2600 Ralston/18.

- (a) Does PacifiCorp agree that the Jim Bridger water rights can be transferred to a third party?
- (b) Does PacifiCorp agree that the Jim Bridger water rights have monetary value?
- (c) Has PacifiCorp considered issuing an RFQ for the transfer, sale, or lease of any coal generation related water rights? If so, please identify the anticipated date for issuing the RFQ and any agreed upon elements of the RFQ, such as bidder qualifications. If not, why not?

Response to AWEC Data Request 0145

- (a) PacifiCorp believes that some portion of the water rights for the Jim Bridger plant could be available for transfer to a third party subject to requirements of Wyoming law and assuming a market for the particular water rights exists.
- (b) Yes, subject to the limitations addressed in the response to (a) above.
- (c) No. PacifiCorp has not yet made the determination that it should transfer, sell or lease its water rights.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0147

AWEC Data Request 0147

Please refer to PAC/3100, McCoy/39 at lines 11 to 13.

- (a) Please identify the FERC accounts or assets that the referenced standard practices do not apply to.
- (b) Does PAC agree that group depreciation standards and practices apply to generation plant? If no, why not?
- (c) Please provide the percent of Oregon meters by net book value that were replaced as part of the AMI rollout.
- (d) Other than the AMI rollout, has PacifiCorp performed a state-wide replacement of assets in a single depreciation group? If yes, please provide each instance and include the percent of assets replaced by count and net book value.

Response to AWEC Data Request 0147

- (a) Group depreciation does not apply to Land, Non-Utility, Leasehold Improvement or Intangible assets.
- (b) Yes, the Company applies the concept of group depreciation to its Generation assets.
- (c) Under group depreciation, retirements of assets within a group are assumed fully depreciated and charged in their entirety to the depreciation reserve. As a result, Oregon meters replaced as part of the Advanced Metering Infrastructure (AMI) rollout were considered to be at zero net book value at the time of their retirement.
- (d) Other than AMI, the Company has not performed any state-wide replacements of assets in a single depreciation group in the state of Oregon.

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0149

AWEC Data Request 0149

Please refer to Exhibit PAC/3106, McCoy/1.

- (a) Please provide the expected timing of the \$35 million in decommissioning costs by month incurred.
- (b) Please provide the basis for the \$35 million estimate.

Response to AWEC Data Request 0149

- (a) Demolition of Cholla Unit 4 will not begin until Arizona Public Service Company retires the remaining active generating units (Cholla Unit 1 and Cholla Unit 3) of the Cholla plant, currently scheduled for the end of 2025.
- (b) The \$35 million figure was comprised of a \$25 million estimate related to pond closures and post-closure monitoring, a \$5 million estimate related to other demolition activities which would include site preparation, removal of stack and cooling tower, dismantling and removal of common site structures, and final site grading, and a \$5 million estimate related to the reclamation of Cholla Lake.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0151

AWEC Data Request 0151

Please refer to Paragraph 18 of the Stipulation in UE 352. Please identify all accounting entries made by PacifiCorp to comply with this paragraph.

Response to AWEC Data Request 0151

The accounting entries made by PacifiCorp are shown below:

- (1) To book additional depreciation expense as a result of the release of Oregon buy-down of repowered wind assets:

<u>FERC</u>	<u>Description</u>	<u>Debit</u>	<u>Credit</u>
403	Depreciation Expense – OR Incr	160,022,477	
108	Accumulated Depreciation – OR Incr		160,022,477
282	DTL - PP&E	39,344,086	
411.1	Deferred Tax Exp-CR-Federal-Electric		32,079,066
411.1	Deferred Tax Exp-CR-State-Electric		7,265,020

- (2) To book the reduction of non-property excess deferred income taxes (EDIT) regulatory liability and related tax impacts:

<u>FERC</u>	<u>Description</u>	<u>Debit</u>	<u>Credit</u>
254	RL – Non-Property EDIT - OR	15,768,650	
411.1	Deferred Tax Exp-CR-Federal-Electric		15,052,754
411.1	Deferred Tax Exp-CR-State-Electric		715,897
190	DTA 705.282 RL Non-Property EDIT - OR		3,876,975
410.1	Deferred Tax Exp-CR-Federal-Electric	3,161,078	
410.1	Deferred Tax Exp-CR-State-Electric	715,897	

- (3) To book the reduction of non-protected property, plant and equipment (PP&E) EDIT regulatory liability and related tax impacts:

<u>FERC</u>	<u>Description</u>	<u>Debit</u>	<u>Credit</u>
254	Reg Liab - Non-Prot PP&E EDIT - OR	99,997,829	
282	DTA RL - Non-Prot PP&E EDIT		75,411,763
190	DTA RL - Non-Prot PP&E EDIT - Gross Up		24,586,066
282	DTL Non-Prot PP&E EDIT - OR	75,411,763	
411.1	Deferred Tax Exp-CR-Federal-Electric		75,411,763

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UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0151

(4) To book reduction of the protected PP&E EDIT amortization regulatory liability and related tax impacts:

<u>FERC</u>	<u>Description</u>	<u>Debit</u>	<u>Credit</u>
254	RL - Protected PP&E Amort - OR	44,255,999	
411.1	Deferred Tax Exp-CR-Federal-Electric		42,246,777
411.1	Deferred Tax Exp-CR-State-Electric		2,009,222
190	DTA 705.348 RL Protected PP&E Amort OR		10,881,045
410.1	Deferred Tax Exp-DR-Federal-Electric	8,871,823	
410.1	Deferred Tax Exp-DR-State-Electric	2,009,222	

Please refer to the information provided below which provides an overall summary of the accounting entries:

<u>FERC</u>	<u>Category</u>	<u>Debit/(Credit)</u>
108	Accumulated Depreciation	(160,022,477)
254	Regulatory Liability	160,022,477
190	Deferred Tax Asset	(39,344,086)
282	Deferred Tax Liability - Property	39,344,086
Subtotal: Deferred Income Tax Balance		-
Subtotal: Balance Sheet Impact		-
403	Depreciation Expense	160,022,477
411.1	Deferred Tax Expense - Credit - Fed & State	(174,780,497)
410.1	Deferred Tax Expense - Debit - Fed & State	14,758,020
Subtotal: Deferred Income Tax Expense		(160,022,477)
Subtotal: Income Statement Impact		-

Despite PacifiCorp's diligent efforts, certain information protected from disclosure by the attorney-client privilege or other applicable privileges or law may have been included in its responses to these data requests. PacifiCorp did not intend to waive any applicable privileges or rights by the inadvertent disclosure of protected information, and PacifiCorp reserves its right to request the return or destruction of any privileged or protected materials that may have been inadvertently disclosed. Please inform PacifiCorp immediately if you become aware of any inadvertently disclosed information.

UE 374/PacifiCorp
July 22, 2020
AWEC Data Request 0152

AWEC Data Request 0152

Please refer to PAC/3100, McCoy/52.

- (a) Does PacifiCorp expect the assessed value for the Cholla facility to change once the plant stops operating?
- (b) Does PacifiCorp expect the assessed value for the Cholla facility to change as facilities are demolished?
- (c) Did PacifiCorp include or consider property tax in the Cholla decommissioning costs on Exhibit PAC/3106, McCoy/1?

Response to AWEC Data Request 0152

- (a) Yes. PacifiCorp currently expects the assessed value assigned to Cholla Unit 4 to decline after the plant stops operating and thus the amount of Cholla related property tax expense for tax year 2022 should be lower than the amount of Cholla related property tax expense for tax year 2021.
- (b) No.
- (c) No, property taxes are not considered decommissioning costs, and were therefore not included in the Cholla decommissioning cost estimates.

UE 307 / PacifiCorp
May 11, 2016
OPUC Data Request 1

OPUC Data Request 1

Coal Costs - Please refer to PacifiCorp's long term supply plan for Jim Bridger filed on December 30, 2015 in compliance with Order No. 13-387 in docket UE 264 and Order No. 14-331 in docket UE 287.

- (a) Please provide all work papers used to generate this document. Please ensure that such work papers support the values presented in Confidential Table 3 of the referenced document (See confidential attachment to this DR).
- (b) Were the costs associated with the **[Begin Confidential]** [REDACTED] **[End Confidential]** Jim Bridger rail unloading facility upgrade included in the 2013 PacifiCorp IRP analysis?
- (c) If the response to (b) above is yes, please provide the Jim Bridger coal costs in the 2013 IRP and demonstrate how the rail unloading facility upgrade costs were included.
- (d) Were the costs associated with the **[Begin Confidential]** [REDACTED] **[End Confidential]** Jim Bridger rail unloading facility upgrade included in the 2015 PacifiCorp IRP analysis?
- (e) If the response to (d) above is yes, please provide the Jim Bridger coal costs and demonstrate how the rail unloading facility upgrade costs were included.
- (f) What was the expected depletion date for Bridger Coal Company's underground operations in 2013?
- (g) What was the expected depletion date for Bridger Coal Company's underground operations in 2015?

Response to OPUC Data Request 1

- (a) Please refer to Confidential Attachment OPUC 1 for the workpapers requested.
- (b) No, the fuel source for Jim Bridger Plant in the 2013 IRP analysis did not include external coal in sufficient quantities to require a rail unloading facility upgrade.
- (c) Not applicable.
- (d) No, the preliminary estimate of **[Begin Confidential]** [REDACTED] **[End Confidential]** for rail unloading facility modifications required to support external coal supplies was developed for planning purposes in May 2015 for inclusion in Company's fall 2015 business plan. Potential rail unloading facility modification scope and costs will continue to be refined as future long term fueling plans are

UE 307 / PacifiCorp
May 11, 2016
OPUC Data Request 1

developed.

(e) Not applicable.

Responses subparts (f) and (g) below are submitted following further clarification of the request as provided by OPUC Staff.

(f) The expected depletion date for Bridger Coal Company's underground operations as of the April 30, 2013 IRP filing was 2037.

(g) The expected depletion date for Bridger Coal Company's underground operations as of the March 31, 2015 IRP filing was 2023.

Confidential information is designated as Protected Information under Order No. 16-128 and may only be disclosed to qualified persons as defined in that order.

Pages 37-38 of Exhibit AWEC/501 contains Protected Information Subject to Order No. 20-040 and has been redacted in its entirety.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON**

UE 374

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER,)
)
Request for a General Rate Revision.)
_____)

EXHIBIT AWEC/502

EXCERPT OF AWEC OPENING TESTIMONY IN UM 1662

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1662

In the Matter of)
)
PORTLAND GENERAL ELECTRIC)
COMPANY)
)
and)
)
PACIFICORP d/b/a PACIFIC POWER)
)
Request for Generic Power Cost Adjustment)
Mechanism Investigation.)
_____)

REPLY TESTIMONY OF BRADLEY G. MULLINS

ON BEHALF OF THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

May 11, 2015

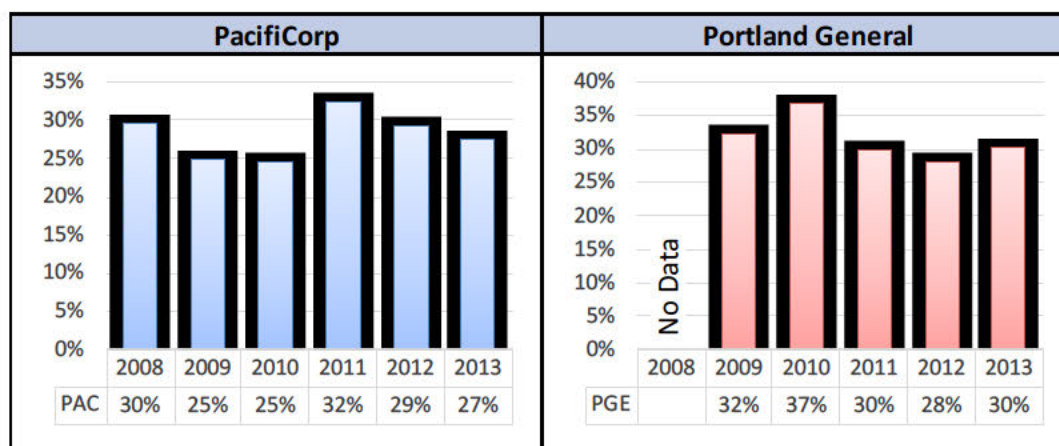
recovery through their proposed RRTM. On the other hand, if market prices are higher in actual operation than in the Joint Utilities' forecast, the proposed RRTM may result in an increased refund to customers, despite the fact that the Joint Utilities' overall power costs may be higher as a result of higher market prices. This fundamental problem with the Joint Utilities' proposal would produce results that are not reasonable, suggesting that the RRTM should be rejected.

D. Renewable Resource Variability

Q. HOW DOES THE YEAR-TO-YEAR VARIABILITY OF RENEWABLE RESOURCES COMPARE TO OTHER ASPECTS OF POWER COSTS?

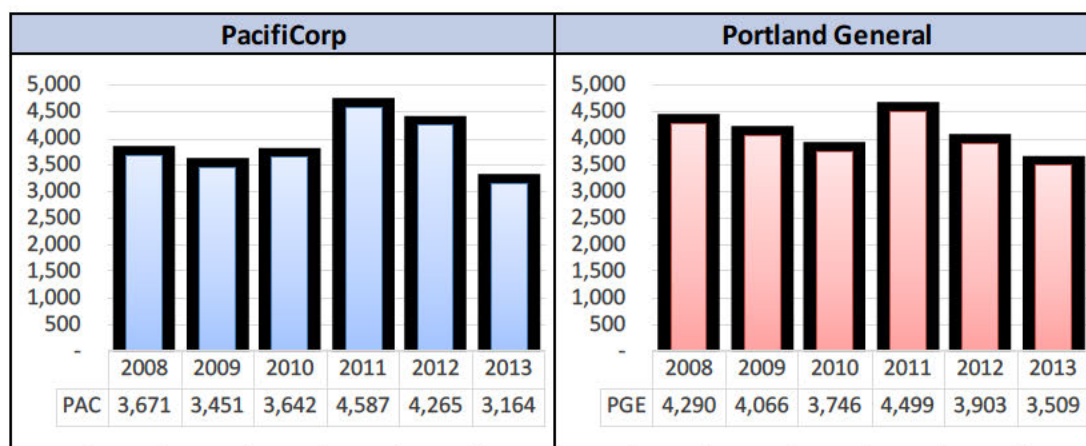
A. The annual level of generation expected from renewable resources remains relatively stable, year-to-year, compared with other aspects of power costs. Figure 1, below, demonstrates the actual capacity factor of the Joint Utilities' wind resources between 2008 and 2013. The figure demonstrates the relative stability of wind output on an annual basis. The relative standard deviation of the year-to-year variation in wind output is approximately 10.8% and 10.7% percent for PacifiCorp and PGE, respectively.

Figure 1
Actual Wind Generation (System Capacity Factor)
2008 – 2013



A threshold question for determining whether the variability associated with renewable resources is so extraordinary to warrant unique rate treatment is whether renewable resource generation is more variable year-to-year than other power cost items. As a comparator, Figure 2, below, details the Joint Utilities' actual hydro generation between 2008 and 2013.

Figure 2
Actual Hydro Generation (GWh)
2008 – 2013



As can be noted from a comparison of the two figures, the year-to-year variability of wind output between 2008 and 2013 has been comparable to the variability of hydro output over the same period. In contrast to wind output, with a relative standard deviation of approximately 11.0% for both utilities, the relative standard deviation of hydro output detailed in the above figure above was 14.0% and 9.0% for PacifiCorp and PGE, respectively. This demonstrates that the year-to-year variability in hydro output was comparable to that of wind output in the period 2008 to 2013. Based on this, it does not appear that the annual variability of renewable resource generation is so significant as to warrant the extraordinary rate treatment proposed by the utilities.

In Order No. 05-1261, the Commission determined that recovery under a hydro-only PCAM should be “limited to unusual events.”^{26/} Given that hydro output has been at least as variable as wind output, such variability does not provide a basis for the Joint Utilities to request a special recovery mechanism that is not subject to the same design criteria as their hydro resources.

Q. DO YOU AGREE WITH THE UTILITIES THAT SB 838 COMPLIANCE HAS MADE IT MORE DIFFICULT TO FORECAST POWER COSTS?

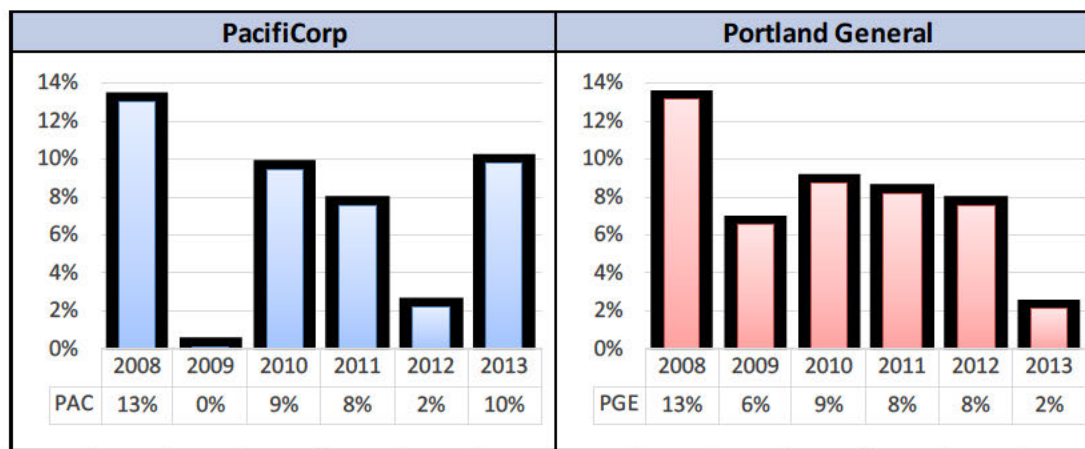
A. No. The Joint Utilities argue that their circumstances have changed since SB 838 was passed and that they now have far more renewable resources on their systems, which is making it more difficult to forecast power costs.^{27/} They argue that “[t]his problem will only become worse as the Joint Utilities’ renewable energy requirements increase to 25 percent of retail load in 2025.”^{28/} The data, however, does not support the Joint Utilities’ position that increased renewables on the system are making it more difficult for them to forecast power costs. Figure 3, below, details the absolute value of deviations between forecast and actual power costs between 2008 and 2013, on a percentage basis.

^{26/} Docket Nos. UE 165/UM 1187, Order No. 05-1261 at 8 (Dec. 21, 2005).

^{27/} PGE-PAC/100 at 5:17-6:2.

^{28/} Id. at 7:14-15.

Figure 3
Absolute Percent Deviation between Forecast and Actual Power Costs
2008 – 2013



In 2008, the difference between PacifiCorp’s forecast and actual power costs was \$127.7 million on a total-company basis, a deviation of 13%. In 2014, its forecast deviation was 10%, and in no year since 2008 did the difference between the utility’s forecasted and actual power costs exceed 13%. The same is true for PGE. The utility’s forecast deviation in 2008 was also 13%, compared to a forecast deviation of two percent in 2013. Like PacifiCorp, in no year since 2008 did the utility’s forecast deviation exceed 13%. Between 2008 and 2013, PacifiCorp and PGE added approximately 1,300 MW and 325 MW of new wind resources, respectively. Yet, the power cost differentials over this period actually declined. Thus, the data does not support the Joint Utilities’ argument that increased renewable resources on their systems has made it more difficult to forecast power costs in rates.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON**

UE 374

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER,)
)
Request for a General Rate Revision.)
_____)

EXHIBIT AWEC/503

REVISED AWEC ADJUSTMENTS TO KIEWIT DECOMMISSIONING REPORT

(REDACTED VERSION)

Exhibit AWEC/503 contains Protected Information Subject to Order No. 20-040 and has been redacted in its entirety.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON**

UE 374

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER,)
)
Request for a General Rate Revision.)
_____)

EXHIBIT AWEC/504

AWEC SUMMARY OF PACIFICORP RESPONSE TO AWEC DR 100

Misc. Closure Costs by Offset Account 2016 to 2019

Row Labels	Sum of ValCOArCur
EAST MOUNTAIN ENERGY LLC	13377733.84
Payroll/Salary-Net P	4748374.806
W W CLYDE & CO	2751848.65
VENABLE LLP	577883.4
STOEL RIVES LLP	400415
STAKER & PARSON COMPANIES	339276.5
JONES & DEMILLE ENGINEERING	268848.69
U S DEPT OF THE INTERIOR	120468
OCTOBER THREE CONSULTING LLC	111072.52
Consult-Tech Serv	107080.46
JACKSON KELLY PLLC	92780.76
EMERY COUNTY ROAD DEPT	62305
AMERICAN ARBITRATION ASSN INC	58310.6
Annual Incentive Pln	54113.1
SGS NORTH AMERICA INC	53947.06
NIELSON CONSTRUCTION CO	52723.98
AERO-GRAPHICS INC	49655
DRINKER BIDDLE & REATH LLP	48544.8
CHRISTIANSEN LAW PLLC	44826.13
EMERY TELCOM	44738.37
FAS 158 Pen Liab Adj	44227.98
Prov Unemp Tax	40189.92
SANCHEZ CLEANING SERVICES INC	36519.79
BHE Affl Svc-Lbr/Ovh	32948.63
Corp Card Clear Acct	32596.59
ENERGY VENTURES ANALYSIS INC	31500
DAVID STANTON SMITH	27109.95
SKYDANCE HELICOPTERS OF NORTHERN	24540
GOODIN MACBRIDE SQUERI & DAY LLC	24535.23
MIDDLEMAN SETTLEMENT PAYMENTS	23311.91
ENVIROWEST LLC	22621.48
Legal Cnslt Sv-LFee	20290
ARMEDA MCKINNON ILLIQUID ASSTS TRST	19000
RHINEHART OIL CO INC	18239.36
JOHN T BOYD CO	16937.5
K-Plus Emplry Cntr-F	16671.49
Purch Card Trans Lia	15593.27
BODEC INC	14703.77
SOCIO ECOLOGICAL CONCEPTS	14606.75
Accr - Payroll/Salar	14188.87
AON RISK SERVICES CENTRAL INC	13934.76
STAPLES CONTRACT & COMMERCIAL INC	12218.9
MT NEBO SCIENTIFIC INC	11358.2
LANCASTER DRILLING INC	9908.02
CARLSON SOFTWARE INC	9750
CEMENTATION USA INC	9129
T&E Expense Liab	9038.03
GOODIN MACBRIDE SQUERI & DAY LLP	8344.33
K V FENCING	8303
J PHILLIP COOK & ASSOCIATES LLC	7811.11
SMITH AUTO COMPANY	7750.69

VERIZON WIRELESS	7620.36
GENCO MINE SERVICE	7460.97
WELLS FARGO BANK NA	7206.52
NELCO CONTRACTORS INC	6880.78
LONGWALL WEST	6663.71
A&M ENGINEERING LLC	6634.22
INTERWEST MINING CO	6600
RIGHT OF WAY	6500
CROWELL & MORING LLP	5740.5
CASTLE VALLEY LANDSCAPING	5659
ERIK C PETERSEN	5510
I/Co A/P - MEC	5050.55
EARTHFAX ENGINEERING INC	4927.35
CCI MECHANICAL INC	4762.94
J P MORGAN SECURITIES INC	4759.74
AUTODESK INC	4586.62
RAND WORLDWIDE SUBSIDIARY INC	4366.51
Oth Salary Overhd	4278.63
Incentive Plan - Cor	4152.56
STATE OF UTAH	4137.72
ABB ENTERPRISE SOFTWARE INC	3887.43
BHE Affl Svc-Emp Exp	3670.53
MONSEN ENGINEERING INC	3661.65
RECORD XPRESS OF CALIFORNIA LLC	3497.78
AAA FIRE SAFETY & ALARM INC	3420.66
PETERSEN HYDROLOGIC LLC	2967
STATE OF UTAH - TAX COMMISSION	2889.3
EARTHFAX ENGINEERING GROUP LLC	2426.6
HP INC	2288.52
ELWOOD STAFFING SERVICES INC	2280.96
BRUNOS PLUMBING	2069.94
PLANET DEPOS LLC	2054.58
WHEELER MACHINERY CO	1963.15
J & D AUTOMOTIVE	1951.66
HUNTINGTON CITY	1843.13
CITIBANK USA NA	1673.1
CULLIGAN WATER TEK INC	1515.76
INTER-MOUNTAIN LABORATORIES INC	1493.9
LANDON JACOBSON	1278.17
WASTE CONNECTIONS OF UTAH	1217.68
RAY QUINNEY & NEBEKER	1209
HORIZON LABORATORIES	1018.55
Post-Ret Exp(Ben)NSC	854.11
Med/Dent/Vision - En	851.19
DATADOC IMAGING SERVICES	838.32
CHEMTECH-FORD INC	820
Cntr Reg A 2016 Pn P	769.43
CDW LLC	697.72
COLE-PARMER INSTRUMENT CO INC	697.34
ALSCO INC	672.91
Utah Vehicle License & Registration	644.76
FEDERAL EXPRESS CORP	527.29
BOOKCLIFF SALES INC	422.1
Wright Fuel Card	378.18

XTELESIS CORPORATION	365.33
BLAIR ENTERPRISES LLC	315
WORKFORCE QA CSS HOLDINGS LLC	315
South Eastern Utah Title	310.5
BULLS EYE SOLUTIONS INC	291.36
ARDMORE POWER LOGISTICS LLC	228.87
ENTRY SYSTEMS INC	228.43
ROCKY MOUNTAIN HP CONSULTANTS INC	225
HORIZON LABORATORIES INC	222.92
ECHO GLOBAL LOGISTICS INC	222.13
SUN ADVOCATE	180
LARRY H MILLER FORD TRUCKLAND	165.45
UNIVERSAL FIELD SERVICES INC	127.3
SecurID	104
WASTE CONNECTIONS INC	102.98
HAROLD LEMAY SERVICES	52.98
HAROLD LEMAY ENTERPRISES	52.98
Comp Hardware	41
ROBERT JAMES DAVIS	24.16
PRECISION TRUCK & TRAILER	15
QWEST COMMUNICATIONS SVCS	3.46
Minnesota Life Insur	-3.31
Misc M&S	-17.77
P/R Tax Payable	-22.24
Dental Insur Payable	-30.61
Vision Insur Payable	-45.94
CASTLE VALLEY HOSPITAL	-105
GR/IR Clearing	-149.81
RegA-Post-Ret-Settle	-206.02
PITNEY BOWES	-383.96
Lodging	-389.13
Med/Dent/Vision	-744.63
Medical Insur Payabl	-763.8
Prov Soc Sec Tax	-1256.13
Accrued Unemp Tax-UT	-2012.32
HOLMES MURPHY & ASSOC LLC	-3927
PT Accrual Non-Union	-5900.62
Reg Asset - FAS 158	-8709.96
Safety Awards Pay	-9105.4
Equipment Rent	-11314.1
RAFAEL REYES	-16836.75
Interco A/R-Curr	-17288.82
Secondary Labor Adj	-19528
UWUA 127 Reg/Ord	-21500
Severance Pay	-38960.52
EW Cash AP	-52786.92
FAS 158 Pen Liab	-67905
HEALTHSMART	-70791.96
Accrued A/P - Mining	-94364.46
Post Employ Ben-FAS	-126780
Mn Dep-Dep Clr Acct	-152169.42
Misc Contr/Serv	-158401.99
State Street Bank & Trust (Retiree	-187998.34
Accr - Severance	-377960.47

(blank)	-1316131.89
Grand Total	21,373,877.84

Misc. Closure Costs by Cost Element 2016 to 2019

Row Labels	Sum of ValCOArCur
Misc Contr/Serv	14258293.28
Consult-Tech Serv	2902436.97
Non Union Reg/Ord	2601007.1
Legal Cnslt Sv-LgFee	1156792.31
Misc M&S	353507.07
Bonuses and Awards	352683.33
Manager	276303.72
Annual Incentive Pln	236904.25
401(k) Expense	225239.7
Mgt Fee: Pacificorp	184600
Payroll Tax Exp	174395.3059
Coal Leases	144029.27
MdAm Aff Srv-Lbr/Orh	69199.22
Engineer Serv	54060.39
Stock/401(k)/ESOP	53109.09
Unused Leave Payout	48537.85
Filing Fees	38188.41
Bonuses and Awards-O	26708.75
401(k) - Enhanced Fx	23223.03
Comp Software/Lic	20431.94
Pension - Non Union	19185.45
Office Supplies	12594.32
Const & Maint Other	12317.8
Veh/Mob Equip-Fuels	12271.41
Bank Chgs & Fees	12171.89
Property Services	11796.4
Vehicles-Ext Serv	11090.13
Dental	10974.14
Rights of Way Exp	9801
Auto/Park/Mileage	9237.6
Cell Phone	8015.27
MdAm Aff Srv-Emp Exp	7902.75
Legal Cnslt Srv-Expt	7811.11
Auto Expense-Mileage	6181.87
Journeyman	5310.72
Life	5077.61
Other Emp Rel Exp	4991.05
Liab Ins-Surety Bond	4580
Vehicles	4549.54
VEHICLE EXPENSE - LI	4500.48
Storage Serv	3942.78
I.T. SW Maint. Svcs	3887.43
Comp Hardware	3853.38
Payroll Tax Exp-Unem	2542.93
Temp Services-Other	2280.96
Freight Serv	2124.71
Legal Cnslt Sv-LCos	1940.36
Procurement Common	1812
Permits & Licenses	1687.72
Dues & Licenses	1620.56
On-Site Meals & Refr	1607.74

Janitorial Serv	1605.85
Meals/Entertain	1489.59
Lubricants, Oil, Gre	1443.83
Water	1031.51
Non Union O/T Pay	824.16
Vision	797.43
Lodging	774.81
Pension Expense	769.43
Serv and Recog Awrds	696.67
Transformers	632.71
Oth Elect Equip/Supp	569.4
Other Deductions	501.99
Oth Royalties -Mines	500
Wood Products	422.04
Other Tax and Fees	396
Sfty Sppl Stp/Allwnc	340.07
Poleline Hardware	268.91
Stores Exp Distribut	250.45
Veh-Axles/Brk Sys	222.91
Books & Subscript	194
Journeyman Unched OT	180
Uniform / Safety Eqp	163.09
Repair/Maint	105
Liability Insurance	102.76
Insulators	94.2
Breakers & Switches	74.41
Conductor	70.27
Postage	60.44
Misc A&G Exps	57.03
Printing and Imaging	50.72
Mechanic	47.94
Delivery/Courier Ser	45.64
Vehicle Rental & Exp	32.7
Other Ground Transp	29.1
Veh-Acces/Elec Acces	27.53
Fasteners	22.96
Printing/Imaging Svc	21.32
Tools	21.31
Telecom-Dial-up/Remo	12
Sever/Redund	1.45519E-11
Advert Serv	-42.95
RegA-Deer C-Misc Cost	-396
Black Lung Benefit	-3927
Other O&M Expense	-7647.9
Oth Salary Overhd	-10878.41
Equipment Rent	-11144.1
Const & Maint Labor	-12026.44
Secondary Labor Adj	-19528
Supp Enemp Ben	-34608.52
Telephone	-61307.76
Unusd Leave Acc-NonU	-74963.96
Royalties	-94110.46
Supervisor/Engineer	-104848
PostRetire Exp-NonUn	-127832.74

Sever Pay	-151393.5
Staff	-242000
Reg/Ordinary Time	-474244
Medical	-617484.7
Grand Total	21373877.84

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July 24, 2020

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EXHIBIT LIST

- AWEC/601 – Gorman Recommended Rate of Return (Page 1)
Gorman Proposed Capital Structure (Page 2)
- AWEC/602 – Standard & Poor’s Credit Metrics
- AWEC/603 – Major Rate Case Decisions (Pages 1-2),
Treasury and Utility Bond Yields (Page 3)

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017. I am employed by the firm of Brubaker & Associates, Inc. ("BAI"), regulatory and economic consultants with corporate headquarters in Chesterfield, Missouri. My qualifications were provided in Exhibit AWEC/201.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the Alliance of Western Energy Consumers ("AWEC"). AWEC members include large energy consumers that purchase services from PacifiCorp, dba Pacific Power ("PacifiCorp" or the "Company").

Q. ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR TESTIMONY?

A. Yes. I am sponsoring Exhibit AWEC/601 through Exhibit AWEC/603.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will respond to certain assertions made in the Reply Testimony of PacifiCorp witnesses Nicki L. Kobliha and Ann E. Bulkley.

II. RESPONSE TO MS. KOBLIHA

Q. DID MS. KOBLIHA TAKE ISSUE WITH POSITIONS YOU TOOK IN YOUR OPENING TESTIMONY?

A. Yes. Ms. Kobliha argues that my adjustments to the Company's proposed capital structure offered in my Opening Testimony are not reasonable. In that testimony, I demonstrated that the Company's proposal to set rates based on a forecasted ratemaking capital structure for the projected test year of December 31, 2021 of 53.52% is not

1 economically justified. Based on my analysis, I recommended a ratemaking capital
2 structure composed of 50.64% common equity.

3 **Q. PLEASE DESCRIBE MS. KOBLIHA'S REBUTTAL TO YOUR CAPITAL**
4 **STRUCTURE ADJUSTMENT.**

5 A. Ms. Kobliha's rebuttal to my position includes the following:

- 6 1. She believes it is not appropriate to consider historical capital structure
7 information in determining an appropriate forecasted test year capital structure
8 in this proceeding.^{1/}
- 9 2. She states that my recommended capital structure does not recognize the
10 weakening Funds From Operations ("FFO") to Debt that was caused by the
11 recent Tax Cuts and Jobs Act ("TCJA") tax law change that took effect
12 beginning in 2018.^{2/} She states that because of the tax law change an increase
13 and adjustment to previous capital structures are necessary in order to
14 maintain a strong FFO to Debt ratio.
- 15 3. She also states that because the Company recently has entered into renewable
16 purchased power agreements ("PPA") for wind and solar, it is not reasonable
17 to assume that the imputed off-balance sheet ("OBS") debt for PPAs will
18 decline.^{3/}

19 **Q. PLEASE RESPOND TO MS. KOBLIHA'S ASSERTIONS THAT YOUR**
20 **CONSIDERATION OF HISTORICAL DATA, AND FAILURE TO RECOGNIZE**
21 **THE CHANGE IN FFO CAUSED BY THE TCJA RENDERS YOUR**
22 **RECOMMENDATION INVALID.**

23 A. Ms. Kobliha's characterization that my capital structure analysis was based entirely on
24 historical data is in error. My capital structure analysis did consider historical debt ratios.
25 In that portion of my capital structure analysis, I did review credit rating agencies'
26 assessment of historical capital structures and their ability to maintain or support
27 PacifiCorp's credit rating. But importantly, my capital structure analysis did not
28 conclude with a review of only historical data. Instead, I looked at the trend in credit

^{1/} PAC/2100 at Kobliha/6.

^{2/} *Id.*

^{3/} *Id.* at Kobliha/6.

1 rating benchmarks over time, and tested whether or not a continuation of that credit rating
2 would be adequate to support PacifiCorp's bond rating in the prospective future test year.
3 This was done by making projections using the Company's forecasted capital structure
4 mix with off-balance debt equivalents, and short-term debt balances to project
5 PacifiCorp's core Standard & Poor's ("S&P") credit metric coverage of debt. Setting a
6 ratemaking capital structure that maintains financial integrity and credit standing while at
7 the most reasonable cost to customers, is a balanced and reasonable capital structure to
8 use for setting rates. Ms. Kobliha's arguments simply do not address the reasonable cost
9 standard of establishing an overall fair rate of return.

10 **Q. PLEASE COMMENT ON MS. KOBLIHA'S CHARACTERIZATION THAT**
11 **PACIFICORP'S FFO TO DEBT RATIO IS WEAKENING OVER TIME.**

12 A. At Kobliha/7 of PAC/2100, Ms. Kobliha outlines the Company's proposed FFO to Debt
13 ratio over the period 2009-2019. As shown on that schedule, the FFO to Debt ratio does
14 decrease considerably for the period after 2018, relative to the FFO to Debt ratios prior to
15 2018. I do acknowledge that the likely cause of the reduction in the FFO to Debt is the
16 impact from the TCJA. However, the relevant factor that is not addressed by Mr.
17 Kobliha is whether or not the resulting FFO to Debt ratio in 2019 of 18.4% is adequate to
18 support the bond rating. And further, whether or not the FFO to Debt ratios over the
19 period 2009-2018 were much stronger than necessary to support PacifiCorp's actual bond
20 rating.

21 It is significant to understand that prior to the TCJA, utilities' cash flows were
22 enhanced by the tax law that was in effect. The previous tax law included a higher
23 income tax rate, with accelerated tax recovery for plant investment under normal
24 conditions. However, the previous tax law also included bonus depreciation which

1 further enhanced utilities' cash flows. The bonus depreciation went away, and the
2 accelerated depreciation under the new tax law was mitigated by the reduction in the
3 federal corporate income tax rate.

4 While all these circumstances are certainly relevant, what is more important is
5 whether or not the Company's cash flow under the new tax law is still adequate to
6 support its bond rating, at reasonable cost to customers. As I demonstrated in my
7 Opening Testimony, it is.^{4/}

8 **Q. PLEASE RESPOND TO MS. KOBLIHA'S SUGGESTION THAT THE**
9 **COMPANY'S OBS DEBT EQUIVALENTS FOR PPAs WILL INCREASE AS A**
10 **RESULT OF ANTICIPATED PPAs FOR WIND AND SOLAR RENEWABLE**
11 **ENERGY.**

12 **A.** Ms. Kobliha did provide a confidential schedule that provided S&P's updated 2019 off-
13 balance debt equivalents for PacifiCorp. I have confirmed Ms. Kobliha's testimony that
14 the Company's purchased power OBS debt equivalent did increase in 2019. Based on
15 Ms. Kobliha's testimony, that is due to purchased power agreements related to wind and
16 solar generation.

17 Since this increased OBS debt equivalent can be confirmed, I have updated by
18 capital structure to reflect this higher number in my test year capital structure assessment
19 as described in my Opening Testimony. As shown on my Exhibit AWEC/601 and as
20 outlined in Table 1 below, reflecting the increased OBS debt equivalent based on the
21 2019 update from S&P, would support a ratemaking capital structure with a 51.86%
22 common equity ratio. This is an increase from the 50.64% common equity ratio
23 recommended in my Opening Testimony.^{5/}

^{4/} AWEC/200, Gorman/63:3-6.

^{5/} AWEC/200, Gorman/29 (Table 8).

TABLE 1

Gorman's Proposed Capital Structure
(December 31, 2021)

<u>Description</u>	<u>Weight</u>
Long-Term Debt	48.13%
Preferred Stock	0.01%
Common Equity	<u>51.86%</u>
Total Regulatory Capital Structure	100.00%

Source: Exhibit AWEC/601.

This updated ratemaking capital structure analysis was based on the same financial capital structure to regulatory capital structure assessment described in my Opening Testimony. Again, the only change made to the analysis was the update in the OBS debt equivalent provided by Ms. Kobliha in her Confidential Exhibit PAC/2101.

Q. WILL THE REVISED CAPITAL STRUCTURE IN TABLE 1 ABOVE CONTINUE TO SUPPORT CREDIT METRICS OF FUNDS FROM OPERATIONS ("FFO") AND EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION AND AMORTIZATION ("EBITDA") IN LINE WITH S&P'S BENCHMARKS THAT SUPPORT PACIFICORP'S BOND RATING?

A. Yes. As also included in Exhibit AWEC/602, page 1, I show revised FFO to Debt, and Debt to EBITDA metrics. At my recommended rate of return, and the adjusted ratemaking capital structure described in Table 1 above, the FFO and EBITDA strength of the Company continues to support its current bond rating.

III. RESPONSE TO MS. BULKLEY

Q. PLEASE SUMMARIZE MS. BULKLEY'S OVERVIEW OF RETURN ON EQUITY POSITIONS IN THIS PROCEEDING.

A. Ms. Bulkley's rebuttal is summarized as follows:

- 1 1. Ms. Bulkley finds that Staff witnesses Mr. Matt Muldoon and Ms. Moya
2 Enright's recommended return on equity of 9% and my recommended return
3 on equity of 9.2% are unreasonable in comparison to the authorized returns
4 for vertically integrated electric utilities in the U.S.^{6/}
- 5 2. She believes the adjustments the non-Company return on equity witnesses
6 make to her return on equity analyses are unreasonable.^{7/}
- 7 3. She also observes that the witnesses are not recognizing current market
8 conditions. More specifically, she believes that my assessment of market
9 conditions is incomplete, and that I do not recognize the distinction in utility
10 betas in recognizing the importance of changes in beta on measurement of a
11 utility's cost of equity.^{8/}
- 12 4. She also states that many regulatory commissions are looking beyond the
13 results of market-based models in establishing a fair return on equity. From
14 this, she believes regulatory commissions are awarding returns on equity for
15 utility companies in the range of 9.5% to 9.99% within 2018.^{9/}
- 16 5. She also opines that the TCJA has the effect of increasing utility investment
17 risk, which was not considered by other witnesses in this proceeding.

18 **Q. PLEASE RESPOND TO MS. BULKLEY'S BELIEF THAT YOUR**
19 **RECOMMENDED RETURN ON EQUITY IS TOO LOW IN COMPARISON TO**
20 **OTHER COMMISSION AUTHORIZED RETURNS ON EQUITY FOR**
21 **VERTICALLY INTEGRATED ELECTRIC UTILITY COMPANIES.**

22 A. I disagree with Ms. Bulkley's conclusion. Indeed, my recommended return on equity
23 range is reasonably consistent with authorized returns on equity found appropriate by
24 regulatory commissions at least through the first six months of 2019. This is a period
25 where observable bond yields were much higher than they are today. As shown on my
26 attached Exhibit AWEC/603, a majority of the authorized returns on equity for utility
27 companies fell below 9.5% (11 out of 20 decisions in 2020 through mid-July) and
28 overwhelmingly, these authorized returns on equity were used in conjunction with
29 ratemaking capital structures with equity ratios of about 50%. This includes a recent

^{6/} PAC/2200 at Bulkley/4.

^{7/} *Id.*

^{8/} *Id.*

^{9/} *Id.* at Bulkley/5.

1 decision in Washington for Puget Sound Energy, Inc. – 9.4% ROE and 48.5% equity
2 ratio. These industry findings are in line with my recommendation for PacifiCorp.

3 Also on my Exhibit AWEC/603, I show the monthly average A and Baa bond
4 utility yields as well as Treasury bond yields in 2019 up through the end of June of 2020.
5 As shown on this exhibit, observable utility bond yields have dropped significantly from
6 the first half of 2019, a period that encapsulates the authorized returns on equity well
7 below 9.5% on the majority of observations. If the authorized returns on equity follow
8 changes in capital market costs, the authorized return on equity for PacifiCorp would
9 logically be lower in the current market than it would be in the market that existed at the
10 beginning of 2019.

11 **Q. PLEASE RESPOND TO MS. BULKLEY'S ASSERTION THAT YOU DID NOT**
12 **REFLECT THE CURRENT MARKETPLACE IN RECOMMENDING A**
13 **RETURN ON EQUITY FOR PACIFICORP.**

14 **A.** I disagree. Indeed, my Opening Testimony went into significant detail to assess the
15 current market evidence that demonstrates that my recommended return on equity is
16 economically logical and consistent with current capital market costs. In arriving at my
17 return on equity, I observed the following:

- 18 1. Utility bond yields are relatively low in the market that exists currently.
- 19 2. Utility stock yields generally track utility bond yields, but at a discount. Since
20 utility stocks provide investors both growth and income return via yield,
21 historically utility stocks have had a negative yield spread to observable utility
22 bond yields. However, in the current market, utility stock yields align with
23 utility bond yields with very little spread. This is an indication that the yield
24 component of utility stocks is very high right now, providing a much higher
25 expected return relative to bond yields. This yield component is a factor in
26 the DCF analysis, as well as the growth factor. The DCF model in this case is
27 producing economically logical results and indicates the current market cost
28 of equity is well below 9% for regulated utility companies.

- 1 3. I observed that market evidence does support above average risk premiums in
2 the current marketplace. That is, for securities of increasing levels of
3 investment risk, the equity risk premium relative to a risk-free rate is
4 expanding. This expansion is much higher than that observable from
5 historical data. Based on this evidence, I recommended a return on equity that
6 reflected an above average equity risk premium in measuring a fair return for
7 PacifiCorp.
- 8 4. I did observe that utility beta estimates were low by historical standards. I
9 found this observation to be economically illogical based on observable
10 market evidence. Market evidence suggests that utility risks are relatively
11 stable, but utility betas seem to be producing illogical results. In a period
12 where utility stocks are having relatively stable investment outlooks, and the
13 general market is much more volatile as a result of uncertain futures, that non-
14 normal variation of utility stock returns versus market stock returns is
15 producing obscure beta estimates. Because the current published betas are
16 below historical standards, I thought it was more accurate, and produced a
17 more reasonable result, to use historical average betas in my Capital Asset
18 Pricing Model ("CAPM") study.

19 **Q. DID YOU CONSIDER THE EFFECTS OF THE TCJA IN PROPOSING A FAIR**
20 **RISK-ADJUSTED RETURN FOR PACIFICORP IN THIS PROCEEDING?**

21 A. Yes. As noted above, the TCJA did change tax law and had the effect of negatively
22 impacting utility cash flows. That negative impact on cash flows was done in
23 comparison to abnormally high utility cash flows that existed under the tax law prior to
24 adoption of the TCJA. While utility cash flows have been reduced, those cash flows are
25 still strong and adequate to support the utilities' investment grade bond ratings. In effect,
26 the TCJA took away the enhanced cash flows that were made available to utilities under
27 the old tax depreciation law, which included bonus depreciation in conjunction with
28 normal accelerated depreciation allowed under Internal Revenue Service ("IRS") rules.

29 Because utilities' cash flows remain adequate to support their bond ratings, a
30 reduction in cash flows has not increased investment risk. Rather, it has just required
31 utilities to rely more on external capital in conjunction with internally generated cash
32 flow in order to support capital programs and to make dividend payments. This change

1 in risk, to the extent it impacts return on equity, is already baked into the market data and
2 market outlooks for utility stock investments, dividend payments, and ability to support
3 capital programs that will grow earnings and dividends over time. The risk is known by
4 market participants and is already reflected in observable stock prices and market data.

5 **Q. PLEASE RESPOND TO MS. BULKLEY'S ASSERTION THAT YOUR**
6 **RECOMMENDED RETURN ON EQUITY DOES NOT FULLY REFLECT**
7 **CURRENT MARKET CONDITIONS AND CHANGES IN *THE VALUE LINE***
8 ***INVESTMENT SURVEY* ("VALUE LINE") UTILITY BETAS.**

9 A. This assertion simply has no merit. In performing my CAPM analysis, I carefully
10 reviewed the development of the current market risk premium, and assessed whether or
11 not I believe more recent declines in utility betas are reliable in assessing the market's
12 perception of utility investment risk. It is my thought that because utility stocks have
13 been more stable in the face of more general market volatility, utility betas moved in
14 unexpected relationships with that of the overall market. This phenomenon can cause
15 abnormally high or low utility beta estimates.

16 Because market observable data indicates that risk premiums are probably higher
17 than industry averages, I found it a conflict to assume that a utility with a below average
18 beta was producing reasonable results. Similarly, had the betas been unusually high, I
19 would have compared that to market data to determine whether or not using a high beta in
20 relationship to a low risk-free rate produces an economically logical result. In any event,
21 I carefully reviewed the total combined inputs to the CAPM analysis in order to produce
22 what I believe to be a reliable CAPM return estimate in light of changing market
23 conditions. This is particularly relevant under turbulent market times such as we are
24 experiencing now with a global pandemic, volatile oil markets, and great uncertainty
25 about the near-term impacts on investments.

1 **Q. IS THERE OBSERVABLE MARKET EVIDENCE THAT SUPPORTS**
2 **AWARDING PACIFICORP A RETURN ON EQUITY IN THE LOW 9% RANGE**
3 **AS YOU HAVE PROPOSED?**

4 A. Yes. Authorized returns on equity have fallen below 9.5% on an industry average basis.

5 Utility bond yields have dropped to very low levels relative to historical periods.

6 Utility stock valuations have remained quite robust, where stock yields have
7 actually come in line with bond yields. This is an indication that DCF return estimates
8 are actually producing high expected return results for utility stock investments, not low
9 returns as implied by Ms. Bulkley.

10 Utilities have attracted significant amounts of capital to support very large capital
11 programs while rates are being set reflecting today's very low capital market costs. This
12 is clear and observable evidence that authorized returns on equity reflecting these low
13 capital market costs are fair to investors, fair to ratepayers, and support the utility's
14 financial integrity and access to capital.

15 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

16 A. Yes, it does.

**BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON**

UE 374

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER)
)
Request for a General Rate Revision.)
_____)

EXHIBIT AWEC/601

GORMAN RECOMMENDED RATE OF RETURN (PAGE 1)

GORMAN PROPOSED CAPITAL STRUCTURE (PAGE 2)

(REDACTED VERSION)

PacifiCorp

Gorman Recommended Rate of Return (December 31, 2021)

<u>Line</u>	<u>Description</u>	<u>Weight</u> (1)	<u>Cost</u> (2)	Weighted <u>Cost</u> (3)
1	Long-Term Debt	48.13%	4.77%	2.30%
2	Preferred Stock	0.01%	6.75%	0.00%
3	Common Equity	<u>51.86%</u>	9.20%	<u>4.77%</u>
4	Total	100.00%		7.07%

Source:
Confidential Exhibit AWEC/601, Gorman/2.

PacifiCorp

Capital Structure (December 31, 2021) (In Millions)

Line	Description	PacifiCorp Proposed				Gorman Proposed			
		Regulatory ¹		Financial		Financial		Regulatory	
		Amount (1)	Weight (2)	Amount (3)	Weight (4)	Capital ³ (5)	Weight (6)	Amount (7)	Weight (8)
1	Long-Term Debt	\$ 8,433	46.47%		45.43%		48.25%		49.35%
2	Short-Term Debt	\$ -	0.00%		0.17%		0.17%		0.00%
3	Off-Balance Sheet Debt	\$ -	0.00%		2.07%		2.07%		0.00%
4	Preferred Stock	\$ 2	0.01%		0.01%		0.01%		0.01%
5	Common Equity	\$ 9,713	53.52%		52.32%		49.5%		50.64%
6	Total	\$ 18,148	100.00%		100.00%		100.0%		100.00%

Sources:

¹Exhibit PAC/300, Kobliha/3.

²Response to AWEC 0034, Attachment 0034.

³Kobliha Reply, Confidential Exhibit PAC/2101.

BEFORE THE
PUBLIC UTILITY COMMISSION OF OREGON
UE 374

In the Matter of)
)
PACIFICORP, dba PACIFIC POWER)
)
Request for a General Rate Revision.)
_____)

EXHIBIT AWEC/602
STANDARD & POOR'S CREDIT METRICS

PacifiCorp

Standard & Poor's Credit Metrics

Line	Description	Retail Cost of Service	S&P Benchmark (Medial Volatility)			Reference
		Amount (1)	Intermediate (2)	Significant (3)	Aggressive (4)	
1	Rate Base	\$ 4,194,704,290				Exhibit PAC/1302, McCoy/6.
2	Weighted Common Return	4.77%				Exhibit AWEC/602, Gorman/2, Line 3, Col. 3.
3	Pre-Tax Rate of Return	8.84%				Exhibit AWEC/602 Gorman/2, Line 4, Col. 4.
4	Income to Common	\$ 200,127,822				Line 1 x Line 2.
5	EBIT	\$ 370,669,841				Line 1 x Line 3.
6	Depreciation & Amortization	\$ 337,652,003				Exhibit PAC/1302, McCoy/6.
7	Imputed Amortization	\$ 17,783,509				S&P Capital IQ, downloaded July 9, 2020.
8	Capitalized Interest*	\$ 22,134				Response to AWEC Data Request 0033.
9	Deferred Income Taxes & ITC	\$ (11,537,533)				Exhibit PAC/1302, McCoy/6.
10	Funds from Operations (FFO)	\$ 544,047,935				Sum of Line 4 and Lines 6 through 9.
11	Imputed Interest Expense	\$ 6,470,624				S&P Capital IQ, downloaded July 9, 2020.
12	EBITDA	\$ 732,575,977				Sum of Lines 5 through 7 and Line 11.
13	Adjusted Debt*	\$ 2,597,502,380				Confidential Exhibit AWEC/204, Gorman/1, Sum of Lines 1-4, Col. 5 x OR RB Allocator.
14	Total Adjusted Debt Ratio	50.5%				Exhibit AWEC/204, Gorman/1, Sum Lines 1-4, Col 6.
15	Debt to EBITDA	3.5x	2.5x - 3.5x	3.5x - 4.5x	4.5x - 5.5x	Line 13 / Line 12.
16	FFO to Total Debt	21%	23% - 35%	13% - 23%	9% - 13%	Line 10 / Line 13.
17	Indicative Credit Rating		A	A-	BBB	S&P Methodology, November 19, 2013.

Sources:

Standard & Poor's: "Criteria: Corporate Methodology," November 19, 2013.

* The allocation factor was derived from the June 2019 OR Rate Base and the Total Company Rate base as shown on Exhibit PAC/1302, McCoy/8.

Note:

Based on the April 2020 S&P report, PacifiCorp has an "Excellent" business profile and a "Significant" financial profile, and falls under the 'Medial Volatility' matrix.

S&P Business/Financial Risk Profile Matrix			
Business Risk Profile	Financial Risk Profile		
	3 (intermediate)	4 (significant)	5 (aggressive)
1 (excellent)	a+/a	a-	bbb
2 (strong)	a-/bbb+	bbb	bb+
3 (satisfactory)	bbb/bbb-	bbb-/bb+	bb

PacifiCorp

Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	<u>Description</u>	<u>Weight</u> (1)	<u>Cost</u> (2)	<u>Weighted</u> <u>Cost</u> (3)	<u>Pre-Tax</u> <u>Weighted</u> <u>Cost</u> (4)
1	Long-Term Debt	48.13%	4.77%	2.30%	2.30%
2	Preferred Stock	0.01%	6.75%	0.00%	0.00%
3	Common Equity	<u>51.86%</u>	9.20%	<u>4.77%</u>	<u>6.54%</u>
4	Total	100.00%		7.07%	8.84%
5	Tax Conversion Rate*				1.37080

Sources:

Exhibit AWEC/601.

*Exhibit PAC/1302, McCoy/6.

**BEFORE THE
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EXHIBIT AWEC/603

MAJOR RATE CASE DECISIONS (PAGES 1-2)

TREASURY AND UTILITY BOND YIELDS (PAGE 3)

PacifiCorp Oregon

Recent Rate Case Decisions Electric Utility Rate Case Decisions - Excludes Limited Issue Riders

Line	Decision		State	ROR (%)	ROE (%)	Common	Test year	Rate Base	Rate Change	Case Type
	Date	Company				Equity as % of Capital			Amount (\$000)	
1	1/8/2020	Interstate Power and Light Co.	IA	7.23	10.02	51.00	12/31/2020	Average	127,000	Vertically Integrated
2	1/16/2020	Consolidated Edison Co. of New York, Inc.	NY	6.61	8.80	48.00	12/31/2020	Average	113,251	Distribution
3	1/22/2020	Rockland Electric Co.	NJ	7.11	9.50	48.32	9/30/2019	Year-end	12,000	Distribution
4	1/23/2020	Indiana Michigan Power Co.	MI	6.08	9.86	46.56	12/31/2020	Average	36,400	Vertically Integrated
5	2/6/2020	PacifiCorp	CA	N/A	10.00	51.96	12/31/2019	Average	(5,834)	Vertically Integrated
6	2/11/2020	Public Service Co. of Colorado	CO	6.97	9.30	55.61	8/31/2019	Average	280,544	Vertically Integrated
7	2/14/2020	CenterPoint Energy Houston Electric, LLC	TX	6.51	9.40	42.50	12/31/2018	Year-end	55,942	Distribution
8	2/19/2020	Central Maine Power Co.	ME	6.30	8.25	50.00	6/30/2018	Average	17,420	Distribution
9	2/24/2020	Virginia Electric and Power Co.	NC	7.20	9.75	52.00	12/31/2018	Year-end	N/A	Vertically Integrated
10	2/27/2020	AEP Texas Inc.	TX	6.45	9.40	42.50	12/31/2018	Year-end	743	Distribution
11	2/28/2020	Oklahoma Gas and Electric Co.	AR	5.33	N/A	37.92	3/31/2020	Year-end	5,191	Vertically Integrated
12	3/11/2020	Indiana Michigan Power Co.	IN	5.61	9.70	37.55	12/31/2020	Year-end	77,082	Vertically Integrated
13	3/17/2020	Mississippi Power Co.	MS	7.57	N/A	53.00	12/31/2020	Year-end	(16,681)	Vertically Integrated
14	3/18/2020	Union Electric Co.	MO	N/A	N/A	N/A	12/31/2018	N/A	(32,000)	Vertically Integrated
15	3/25/2020	Avista Corp.	WA	7.21	9.40	48.50	12/31/2018	N/A	28,500	Vertically Integrated
16	4/6/2020	Kentucky Utilities Company	VA	N/A	N/A	N/A	12/31/2018	N/A	9,000	Vertically Integrated
17	4/7/2020	Northern States Power Company - MN	MN	N/A	N/A	N/A	N/A	N/A	N/A	Vertically Integrated
18	4/17/2020	Fitchburg Gas and Electric Light Company	MA	7.99	9.70	52.45	12/31/2018	Year-end	1,067	Distribution
19	4/27/2020	Duke Energy Kentucky, Inc.	KY	6.41	9.25	48.23	3/31/2021	Average	24,124	Vertically Integrated
20	5/8/2020	DTE Electric Company	MI	5.46	9.90	38.32	4/30/2021	Average	188,285	Vertically Integrated
21	5/20/2020	Southwestern Public Service Company	NM	7.19	9.45	54.77	3/31/2019	Year-end	31,000	Vertically Integrated
22	6/29/2020	Duke Energy Indiana, LLC	IN	5.71	9.70	40.98	12/31/2020	Year-end	145,867	Vertically Integrated
23	6/30/2020	Liberty Utilities (Granite State Electric) Corp.	NH	7.60	9.10	52.00	12/31/2018	Year-end	4,150	Distribution
24	7/1/2020	Empire District Electric Company	MO	N/A	N/A	N/A	N/A	N/A	N/A	Vertically Integrated
25	7/8/2020	Puget Sound Energy, Inc.	WA	7.39	9.40	48.50	12/31/2018	Year-end	29,457	Vertically Integrated
26	7/14/2020	Delmarva Power & Light Company	MD	6.84	9.60	50.53	8/31/2019	Average	11,715	Distribution
27	1st Half 2020: Averages/Total			6.70	9.47	47.78			1,144,222	
28	Observations			21	20	22			23	
29	Number Observations at or below 9.5%				11					
30	Number Observations between 9.5% and 10.0%				8					
31	Number Observations above 10.0%				1					

Sources:

1st Quarter Data: S&P Global Market Intelligence, RRA Regulatory Focus, Major Rate Case Decisions -- January - March 2020, Table 5 - Chronology.
Post 1st Quarter Data: S&P Global Market Intelligence, Downloaded 7/21/20.

PacifiCorp Oregon

Recent Rate Case Decisions Gas Utility Rate Case Decisions - Excludes Limited Issue Riders

Line	Decision		State	ROR (%)	ROE (%)	Common Equity as %		Test year	Rate Base	Rate Change	Case Type
	Date	Company				of Capital				Amount (\$000)	
1	1/15/2020	MDU Resources Group Inc.	WY	7.08	9.35	51.25		12/31/2018	Year-end	828	Distribution
2	1/16/2020	Consolidated Edison Company of New York, Inc.	NY	6.61	8.80	48.00		12/31/2020	Average	83,923	Distribution
3	1/24/2020	Roanoke Gas Company	VA	7.28	9.44	59.64		12/31/2017	Average	7,250	Distribution
4	2/3/2020	Cascade Natural Gas Corporation	WA	7.24	9.40	49.10		12/31/2018	N/A	6,500	Distribution
5	2/24/2020	Atmos Energy Corporation	KS	7.03	9.10	56.32		3/31/2019	Year-end	3,067	Distribution
6	2/25/2020	Questar Gas Company	UT	7.18	9.50	55.00		12/31/2020	Average	2,680	Distribution
7	2/28/2020	Fitchburg Gas and Electric Light Company	MA	7.99	9.70	52.45		12/31/2018	Year-end	4,596	Distribution
8	3/25/2020	Avista Corporation	WA	7.21	9.40	48.50		12/31/2018	N/A	8,000	Distribution
9	3/26/2020	Northern Utilities, Inc.	ME	7.34	9.48	50.00		12/31/2018	Year-end	3,605	Distribution
10	4/21/2020	Atmos Energy Corporation	TX	7.71	9.80	60.12		N/A	N/A	(300)	Distribution
11	5/19/2020	Black Hills Colorado Gas, Inc.	CO	6.76	9.20	50.15		6/30/2018	Average	(3,329)	Distribution
12	6/16/2020	CenterPoint Energy Resources Corp.	TX	7.38	9.65	56.95		6/30/2019	Year-end	4,000	Distribution
13	7/8/2020	Puget Sound Energy, Inc.	WA	N/A	9.40	48.50		12/31/2018	Year-end	36,532	Distribution
14	7/8/2020	Oklahoma Natural Gas Company	OK	N/A	N/A	N/A		12/31/2019	N/A	9,650	Distribution
15		1st Half 2020: Averages/Total		7.23	9.40	52.77				120,820	
16		Observations		12	13	13				12	
17		Number Observations at or below 9.5%			10						
18		Number Observations between 9.5% and 10.0%			3						
19		Number Observations above 10.0%			0						

Sources:

1st Quarter Data: S&P Global Market Intelligence, RRA Regulatory Focus, Major Rate Case Decisions -- January - March 2020, Table 5 - Chronology.

Post 1st Quarter Data: S&P Global Market Intelligence, Downloaded 7/21/20.

PacifiCorp Oregon

Treasury and Utility Bond Yields

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield¹</u> (1)	<u>"A" Rated Utility Bond Yield²</u> (2)	<u>"Baa" Rated Utility Bond Yield²</u> (3)
1	07/17/20	1.33%	2.74%	3.07%
2	07/10/20	1.33%	2.80%	3.15%
3	07/02/20	1.43%	2.99%	3.36%
4	06/26/20	1.37%	2.95%	3.35%
5	06/19/20	1.47%	3.00%	3.40%
6	06/12/20	1.45%	3.05%	3.41%
7	06/05/20	1.68%	3.23%	3.59%
8	05/29/20	1.41%	3.11%	3.47%
9	05/22/20	1.37%	3.14%	3.61%
10	05/15/20	1.32%	3.17%	3.70%
11	05/08/20	1.39%	3.13%	3.68%
12	05/01/20	1.27%	2.95%	3.50%
13	04/24/20	1.17%	2.93%	3.49%
14	04/17/20	1.27%	3.02%	3.60%
15	04/09/20	1.35%	3.47%	4.08%
16	04/03/20	1.24%	3.55%	4.26%
17	03/27/20	1.29%	3.94%	4.45%
18	03/20/20	1.55%	4.18%	4.69%
19	03/13/20	1.56%	3.44%	3.90%
20	03/06/20	1.25%	2.68%	3.01%
21	02/28/20	1.65%	2.97%	3.27%
22	02/21/20	1.90%	3.05%	3.37%
23	02/14/20	2.04%	3.14%	3.45%
24	02/07/20	2.05%	3.16%	3.45%
25	01/31/20	1.99%	3.13%	3.44%
26	01/24/20	2.14%	3.18%	3.49%
27	Average	1.38%	3.01%	3.44%
28	Spread To Treasury		1.63%	2.06%

Sources:

¹ St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org>.

² <http://credittrends.moodys.com/>.