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April 2, 2019

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,
2019 Renewable Adjustment Clause
Docket No. UE 352

Dear Filing Center:

Please find enclosed the Opening Testimony and Exhibits of Bradley G. Mullins on behalf of the Alliance of Western Energy Consumers in the above-referenced docket.

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

BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UE 352

In the Matter of	)
	)
PACIFICORP, dba PACIFIC POWER,	)
	)
2019 Renewable Adjustment Clause.	)
	)

OPENING TESTIMONY OF

BRADLEY G. MULLINS

ON BEHALF OF

THE ALLIANCE OF WESTERN ENERGY CONSUMERS

April 2, 2019

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EXHIBIT LIST

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Bradley G. Mullins, and my business address is 1750 SW Harbor Way, Ste 450, Portland, Oregon 97201.

Q. PLEASE STATE YOUR OCCUPATION AND IDENTIFY THE PARTY ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am an independent consultant representing utility customers before state regulatory commissions, with a primary focus in the West. I am appearing on behalf of the Alliance of Western Energy Consumers ("AWEC"), a non-profit trade association whose members are large energy users served by electric and gas utilities located throughout the West, including customers that receive electrical services from PacifiCorp dba Pacific Power.

Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.

A. A summary of my education and work experience can be found at Exhibit AWEC/101.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I discuss my review of the 2019 Renewable Adjustment Clause ("RAC") filing of PacifiCorp. In its filing, PacifiCorp proposed a two-step revenue increase of $32,246,403 in total or approximately 2.5%.[1/] The purpose of PacifiCorp's filing is to seek cost recovery in connection with the proposal it made in its 2017 Integrated Resource Plan to repower the majority of its owned wind resource ("Wind Repowering").[2/] In this testimony, I discuss the ratemaking associated with the Wind Repowering projects in the context of a RAC filing, and offer several recommendations for the Commission to consider.

1/ See March 7, 2019 Errata Filing of PacifiCorp.
2/ Docket No. LC 67

Q. WHAT WAS THE SCOPE OF YOUR REVIEW?

A. I reviewed PacifiCorp's filing and the associated workpapers. I also conducted discovery and reviewed PacifiCorp's discovery responses.

Q. WHAT ARE YOUR RECOMMENDATIONS?

A. Based on my review of this information, I have developed four recommendations. Specifically, I recommend the Commission:

1. *Calculate return on rate base for the repowered wind resources considering accumulated depreciation accrued since Docket No. UE 263 (when the resources were last considered in rates);*
2. *Provide PacifiCorp with recovery, under ORS 757.140(2)(b), of 100% of the undepreciated net book value of property removed from service;*
3. *Adhere to the UM 1330 Stipulation requirement for the RAC to reflect a single annual rate increase; and,*
4. *Condition its order on PacifiCorp filing a general rate case within six months.*

At this time, I am unable to offer a specific revenue requirement recommendation, as further response is necessary from PacifiCorp on certain of the issues discussed above. Notwithstanding, based on the above, PacifiCorp's revenue requirement request is overstated significantly. Before discussing, however, I will provide some background on the Wind Repowering projects and the RAC.

II. BACKGROUND

Q. PLEASE PROVIDE SOME BACKGROUND ON THE WIND REPOWERING PROJECT.

A. The Wind Repowering project was an economic strategy PacifiCorp initially proposed in its 2017 Integrated Resource Plan.[3/] The Wind Repowering strategy itself involves removal of the

[3/] Docket No. LC 67

existing rotor, blades, generators and nacelle structure. This equipment will be removed from service nearly 20 years in advance of the 30-year lifespan assumed for the equipment in PacifiCorp's most recently completed depreciation study in 2013. The removed equipment is to be replaced with new equipment, possessing more advanced generators, rotor blades and other features. The new equipment will make the wind facilities more productive, and will also allow the facilities to qualify for production tax credits for an additional 10 years, providing economic justification for removing existing equipment from service well ahead of the intended useful life.

Q. WHAT WIND RESOURCES ARE BEING REPOWERED?

A. Wind Repowering is being implemented at nearly all of PacifiCorp's owned wind resources. This proceeding concerns nine of the 11 wind sites that will be repowered. After the project is complete, 900.1 MW of nameplate capacity will have been removed from service and replaced with 1,034.7 MW of nameplate capacity.[4/] The nine specific wind resources under review in this proceeding are Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II.[5/] PacifiCorp also plans to repower the Dunlap I and Glenrock III facilities in 2020, although cost recovery for those Wind Repowering activities will be considered in a future docket.[6/] Absent a general rate case filing, the Wind Repowering activities related to Dunlap I and Glenrock III will presumably be considered in PacifiCorp's next annual RAC filing in 2020.

[4/] See Exhibit PAC/204, Hemstreet/1.
[5/] Exhibit PAC/100, Lockey/4.
[6/] Id. at 10.

Q. WHAT COSTS MAY BE RECOVERED THROUGH A RAC FILING?

A. The RAC is a mechanism that has its basis in ORS 469A.120(2). It was implemented as a part of the Renewable Portfolio Standard ("RPS") in SB 838 (2007). The purpose of the RAC mechanism is to allow for "timely recovery of costs prudently incurred by an electric company to construct or otherwise acquire facilities that generate electricity from renewable energy sources …."

The Commission formally established the RAC in Docket No. UM 1330, *An Investigation into Automatic Adjustment Clause Pursuant to SB 838.* In that docket, the Commission approved a stipulation that established both PacifiCorp's and Portland General Electric's RAC schedules. The stipulation specified that these schedules are intended to recover "the actual and forecasted revenue requirement associated with the prudently incurred costs of resources … that are: (1) eligible under SB 838; (2) in service as of the date of the proposed rate change; and (3) approved by the Commission."[7/]

Q. DID PACIFICORP ACT PRUDENTLY IN PURSUING WIND REPOWERING?

A. Under ORS 469A.120(2), only prudently incurred costs are eligible for cost recovery through a RAC. Wind Repowering poses some challenges with respect to a traditional prudence review, however, because PacifiCorp pursued this strategy for purely economic reasons, not because Wind Repowering meets an identified need to serve customers. Accordingly, the prudence of PacifiCorp's actions in this case should be judged based on the cost savings Wind Repowering will provide to customers. That not only depends on the ultimate revenue requirement the Commission approves in this docket, but also on the power cost benefits Wind Repowering provides to customers, as modeled in PacifiCorp's Transition Adjustment Mechanism

[7/] Docket UM 1330, Order No. 07-572, Appen. A at 3 (Dec. 19, 2007).

("TAM"). The TAM, however, was filed on April 1st, one day before the due date for this testimony, so I have not had sufficient opportunity to review PacifiCorp's TAM filing to identify or audit the power cost impacts from Wind Repowering. Consequently, AWEC does not take a position in this testimony on whether Wind Repowering was prudent and will review both the TAM and other parties' testimony in this docket. AWEC will also address the proper inquiry for determining prudence in this case in briefing.

Notwithstanding, my testimony below addresses adjustments to PacifiCorp's revenue requirement request in this case that the Commission should make if it determines that PacifiCorp did act prudently in pursuing Wind Repowering.

Q. IS IT APPROPRIATE TO CONSIDER COST RECOVERY FOR THE WIND REPOWERING PROJECTS IN A RAC FILING?

A. Since the Wind Repowering projects will result in the betterment of renewable energy facilities eligible for SB 838 RPS compliance, AWEC does not necessarily oppose considering cost recovery for the nine Wind Repowering projects in a RAC filing. Notwithstanding, if one is to consider the Wind Repowering projects in the context of a RAC, one must also recognize that the Wind Repowering projects are unique, at least insofar as RAC filings are concerned, and those unique characteristics need to be considered when determining the appropriate level of cost recovery associated with the underlying renewable resources.

Q. HOW IS THE WIND REPOWERING PROJECT UNIQUE COMPARED TO OTHER RAC FILINGS?

A. When the RAC was implemented, the primary consideration was the cost recovery for new RPS compliant generation resources that had never before been considered in base rates. In the UM 1330 Stipulation, removal and replacement activities for existing renewable facilities was not discussed. Paragraph 6(b) of the UM 1330 Stipulation, for example, refers to the costs of a "resource" or "renewable energy source." That sub-paragraph regarding revenue requirement was not drafted to consider just a subset of the costs of a renewable resource. In addition, it is also important to acknowledge that the Wind Repowering projects are unique because they were proposed as economic investments, not specifically for the purpose of complying with the RPS. After one considers these factors, it is apparent that PacifiCorp's proposed revenue requirement increase is overstated.

III. REVENUE REQUIREMENT

Q. PLEASE SUMMARIZE YOUR REVENUE REQUIREMENT RECOMMENDATION.

A. After corrections, PacifiCorp proposes to increase revenues by $32,246,403. There are a number of problems associated with PacifiCorp's proposal, however. As I discuss below, PacifiCorp's approach is flawed because it does not consider that base rates, established in Docket No. UE 263, currently provide PacifiCorp with an amount of revenues that is higher than necessary to recover costs associated with the nine wind resources that are involved in the Wind Repowering program. Due to factors such as accumulated depreciation, the costs of the nine renewable resources in question have declined materially since last considered in base rates in Docket No. UE 263, and I recommend those cost reductions be considered in this Docket. The estimated impact of my initial findings is summarized in Table 1, below.

TABLE 1
Approximate Revenue Requirement Impact of Recommendations

PacifiCorp Proposed Revenue Requirement	$ 32,246,403
Adjustments:	
Return on Rate Base / Accumulated Depreciation	(7,701,614)
Depreciation Expense / ORS 757.140(2)(b)	496,067
Phase-In Method	(140,579)
Adjusted Revenue Requirement	25,040,855

As noted above, the numbers provided in Table 1 are approximations, as PacifiCorp has not provided sufficient information at this time to identify exact adjustments.

Q. WHAT AMOUNT OF ANNUAL REVENUES IS PACIFICORP CURRENTLY COLLECTING FOR THE NINE WIND FACILITIES?

A. In AWEC Data Request 7, PacifiCorp was asked to provide its best estimate of the revenue requirement of the nine repowered wind resources in Docket No. UE 263. In response, PacifiCorp produced no estimate, and instead offered the somewhat perplexing statement that "[r]evenue requirement in rate cases is not prepared at a location detail level." One might assume that PacifiCorp has the expertise to estimate the revenue requirement for the nine individual wind facilities in its UE 263 results of operations, as that is precisely what PacifiCorp is purporting to do in this docket. In the response, PacifiCorp was able to produce the net rate base and operating expenses for the facilities from Docket No. UE 263. Although the information did not identify the impacts of deferred taxes or common plant for the Glenrock complex, the information is sufficient to support some high-level estimates, which I discuss below.

Q. WHAT IS THE REVENUE REQUIREMENT FOR THE NINE WIND RESOURCES FOLLOWING THE REPOWERING?

A. In AWEC Data Request 3, PacifiCorp was requested to provide this information, but PacifiCorp was not able to provide it, even using information as old as June 30, 2018. Accordingly, a precise revenue requirement calculation for the nine Wind Repowering resources is not available at this time.

It is known, however, that the costs of the nine wind resources has declined materially in the six years since UE 263. This is due primarily to the effects of accumulated depreciation.

Also pertinent to the Wind Repowering revenue requirement are the effects of the property that will be removed from service at the nine wind resources. PacifiCorp's testimony is largely silent on the issue, but if the Commission were to approve the retirement accounting PacifiCorp described in discovery, it will have the consequence, which may have been unintended, of actually reducing PacifiCorp's depreciation expenses for the nine facilities, at least until the effective date of the depreciation study.

I discuss these two issues in the following subsections. When taken together, however, I believe there may be a case for allowing PacifiCorp to begin recovering some amount through a RAC surcharge, albeit less than what PacifiCorp has proposed. At this stage in the proceeding, however, it will be necessary to further review and consider PacifiCorp's Rebuttal Testimony on these issues before providing a precise revenue requirement recommendation.

a. <u>Return on Rate Base and Accumulated Depreciation</u>

Q. WHAT RETURN ON RATE BASE HAS PACIFICORP PROPOSED TO RECOVER THROUGH THE RAC?

A. It can be noted in Exhibits PAC/402 and PAC/403 that PacifiCorp has proposed to receive a return on rate base considering the incremental expenditures for only the new replacement equipment at the nine resources involved in the Wind Repowering. Based on its calculation, PacifiCorp requests a return on rate base equal to $18,610,990, consisting of a return on rate base of $8,112,031 and $10,498,959 for the October 1, 2019 and December 1, 2019 step increases, respectively.

Q. DO THE PACIFICORP AMOUNTS ADDRESS THE EXISTING PROPERTY AT THE NINE WIND REPOWERING RESOURCES?

A. No. PacifiCorp's calculation does not address the applicable return on rate base for the existing property at the nine wind resources—such as the property to be removed from service and the property like the tower, foundation, and intangibles not being replaced.

Q. IS THIS CONSISTENT WITH THE STIPULATION ADOPING THE RAC?

A. As noted above, it does not appear that parties to the UM 1330 Stipulation contemplated the type of RAC filing PacifiCorp has made here, where existing renewable resources are "repowered," and so it is somewhat unclear whether PacifiCorp's proposal is consistent with the Stipulation. The Stipulation does, however, specify that the RAC is to include "the return of and grossed up return on costs of the renewable energy source …."[8/] In my opinion, this requirement should apply to the resource as a whole; otherwise PacifiCorp will not earn a return of and on "the renewable energy source." Instead, it will earn a return of and on a renewable energy source both as it existed in 2013 and as it exists following repowering.

Q. DO OTHER PROVISIONS OF THE UM 1330 STIPULATION INDICATE THAT IT IS REASONABLE TO ADDRESS THE RETURN ON EXISTING PROPERTY AT THE NINE WIND REPOWERING RESOURCES IN THIS DOCKET?

A. Yes. PacifiCorp is currently earning a return on rate base for the existing property at the repowered wind resources. The return on rate base for the existing property was established in

8/ Order No. 07-572, Appen. A at 4.

Docket UE 263 in 2013. Since then, however, the rate base, and the associated *return on* rate base, has declined significantly, primarily due to incremental accumulated depreciation accruals, and it was these rate base reductions that were the genesis of the requirement for the renewable resource costs included in the RAC to be updated annually. The Joint Testimony supporting the UM 1330 Stipulation states that the requirement for annual updating of costs in the RAC exists so that "customers' rates will reflect both the reduction in rate base due to depreciation and the current forecast of all costs within the upcoming calendar year."[9/] Thus, the RAC was implemented specifically with the objective of capturing this declining cost structure of renewables; whereas PacifiCorp ignores the otherwise declining costs of the nine wind resources. As witness Randy Falkenberg noted in UM 1330, "the fixed costs of a wind resource decrease dramatically after the first year, compared to conventional resources."[10/]

Q. WHY DO THE COSTS OF RENEWABLES DECLINE SO MUCH MORE RAPIDLY THAN OTHER RESOURCES?

A. The declining cost structure of renewables is due in part to the fact that cost of production for renewables is almost entirely fixed. This issue was discussed in detail in Docket UM 1330.[11/] The declining cost structure of renewables, however, can also be attributed to lower requirement for capital maintenance associated with renewables, in contrast to relatively high capital maintenance for legacy resources.

Q. WHAT WAS THE RATE BASE OF THE NINE WIND REPOWERING RESOURCES IN UE 263?

A. In AWEC Data Request 7, PacifiCorp provided some of the rate base and operating expenses of the nine wind resources in UE 263. The response, however, acknowledged that the

9/ Docket No. UM 1330, Joint Parties/100 at 6:4-6.
10/ Docket No. UM 1330, Order No. 07-572 at 7.
11/ See Docket No. UM 1330, ICNU/100.

responsive information was not the complete set of rate base items included in rates, since the response did not include all of the detail for Glenrock, nor any information related to accumulated deferred income taxes. The values PacifiCorp was able to provide are detailed in Table 1, below.

TABLE 1
UE 263 Rate Base by Wind Facility

Resource	UE 263 Net Plant AWEC DR 07	UE 263 Revenue Requirement Impact	
Leaning Juniper	$ 139,458,639	Total Company	
Seven Mile Hill I	177,709,003	Rate Base	$ 1,250,426,191
Seven Mile Hill II	37,285,435		
Glenrock I	168,565,212	SG Factor	26.05%
Goodnoe Hills	162,838,198		
High Plains	201,300,935	Oregon Rate Base	$ 325,773,556
McFadden Ridge	50,880,568		
Marengo I	198,112,528	"Pre-Tax" ROR	
Marengo II	114,275,673	(after Tax Reform)	9.24%
Total	$ 1,250,426,191	Return on Rate Base	
		In existing rates	$ 30,114,777

As can be seen in Table 1, based on the information provided in response to AWEC DR 7, the return on rate base that PacifiCorp is currently collecting in rates for the nine wind resources is $30,114,777. This includes the effects of the tax reform rate reductions, but not accumulated deferred income taxes.

Q. HOW HAS THE RATE BASE OF THE NINE RESOURCES CHANGED SINCE UE 263?

A. In AWEC Data Request 3, AWEC requested PacifiCorp to provide the rate base of these facilities as of December 31, 2018, and PacifiCorp again did not provide the requested information. Notwithstanding, the magnitude of the incremental accumulated depreciation that has accrued with respect to the nine Wind Repowering resources is material. Based on the depreciation parameters approved in Order 13-347, I estimate that the rate base for these facilities will have declined by approximately $319,786,534 on a total-company basis. Oregon's share of this reduction is approximately $83,313,991, yielding an Oregon revenue requirement impact of approximately $7,701,614. I provide support for this estimate in Exhibit No. AWEC/103.

Q. DO PACIFICORP'S CURRENT RATES RECOGNIZE THIS REDUCTION TO RATE BASE?

A. No. PacifiCorp's rates continue to recognize the level of rate base, and return on that rate base, that was established in its last rate case, UE 263. That is not unusual or inappropriate – traditional ratemaking allows PacifiCorp to reap the benefits of accumulated depreciation and other changes that occur between rate cases, just as it assumes the risk of regulatory lag in this same period. In this case, however, PacifiCorp is requesting special cost recovery through an extraordinary mechanism, the RAC, and it is therefore appropriate to recognize all offsetting costs and benefits associated with the plant that is the subject of the RAC request. Indeed, that was one of the goals of the parties that entered into the RAC settlement.[12/]

Q. WHAT DO YOU RECOMMEND WITH RESPECT TO ACCUMULATED DEPRECIATION FOR THE REPOWERED WIND RESOURCES?

A. I recommend the return on rate base approved for recovery in this matter be offset by the effects of the accumulated depreciation that has accrued since rates were last established in Docket No UE 263.

12/ Order No. 07-572, Appen. A at 7 ¶ 6.j.

b. Depreciation Expenses and ORS 757.140(2)(b)

Q. WHAT AMOUNT OF DEPRECIATION EXPENSES IS ASSOCIATED WITH THE WIND REPOWERING?

A. It appears that PacifiCorp has multiplied the applicable depreciation rates in Order 13-347 to the gross investment of only the new equipment. Based upon this calculation, PacifiCorp proposes to recover $7,609,560 in depreciation expenses through this docket, in addition to the amounts it is currently collecting through base rates. The amount PacifiCorp proposes consists of $3,298,350 and $4,311,210 for the October 1, 2019 and December 1, 2019 step increases, respectively.

Q. DO YOU AGREE WITH PACIFICORP'S APPROACH?

A. No. Current depreciation accrual rates established in Order 13-347 already provide PacifiCorp with recovery of depreciation expenses related to the nine wind resources. Further, since the Wind Repowering projects involve both plant additions and retirements, the incremental depreciation expenses cannot simply be calculated by solely considering the impact of the property additions. The failure to adequately consider the impact of removals on depreciation expenses is a flaw in PacifiCorp's proposal, particularly in light of PacifiCorp's proposals in UM 1968 to delay the effective date of new depreciation accrual rates for several years.

Q. HOW DO PLANT ADDITIONS AND RETIREMENTS IMPACT DEPRECIATION EXPENSES?

A. When a depreciation study is approved, the Commission approves the depreciation accrual rates, not the depreciation expenses themselves. The depreciation accrual rates are calculated as a percentage of the gross plant for each group of property. Accordingly, when new property is added to gross plant, it results in an increase in depreciation expenses. Further, when property is removed from service and retired from gross plant, it results in a reduction to depreciation expenses. PacifiCorp has considered one side of this equation, but ignored the other.

Q. HOW DOES PACIFICORP PLAN TO ACCOUNT FOR REMAINING NET BOOK VALUE OF PROPERTY REMOVED FROM SERVICE?

A. PacifiCorp's testimony is not necessarily explicit on this issue. In PAC/400, for example, PacifiCorp states "[t]he asset value of the replaced wind plant is addressed in the 2018 Depreciation Study filed in docket UM 1968," noting that the depreciation expense included in the RAC has been calculated using currently approved depreciation rates.[13/]

Q. DID YOU REQUEST PACIFICORP TO CLARIFY ITS PROPOSAL FOR THE REMOVED PROPERTY?

A. Yes. PacifiCorp was requested to clarify its proposal with respect to the removed property in AWEC Data Request 8. In response, PacifiCorp states that it plans to apply the remaining unrecovered investment in the removed property as an offset to plant reserve balances associated with the new equipment. Specifically, PacifiCorp plans for the removed plant to be credited from FERC Account 101 (Electric Plant in Service) and debited to FERC Account 108 (Accumulated Depreciation Reserve). The effect of doing this is that it will commingle balances associated with the retired plant with those associated with the new plant, creating unnecessarily complex accounting problems, which I discuss below.

Q. IS IT APPROPRIATE ADDRESS THE UNRECOVERED INVESTMENT IN REMOVED EQUIPMENT IN THIS DOCKET?

A. Yes. Review of the unrecovered investment associated with significant property removals typically occurs outside of the context of a depreciation study.[14/] In addition, the results of the

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13/ PAC/400, McDougal/7 at 4-6.

14/ See, e.g., In the Matter of PacifiCorp dba Pacific Power, Application for Approval of Deer Creek Mine Transaction, Docket No. UM 1712.

UM 1968 depreciation study are still uncertain and might not be effective for several years following the RAC cost recovery period under consideration in this case. Absent considering the ratemaking associated with the removed property in this docket, PacifiCorp will not otherwise be able to adjust the depreciation accrual rates for the nine wind resources to recover the unrecovered investment in the removed property. Accordingly, waiting to address the unrecovered investment in the deprecation docket is not a suitable alternative.

Q. HOW MUCH PLANT WILL PACIFICORP RETIRE IN CONNECTION WITH THE NINE WIND REPOWERING RESOURCES?

A. In AWEC Data Request 9, PacifiCorp was requested to identify the gross plant of the wind facilities that are being retired in connection with its repowering proposal. In response, PacifiCorp stated that it will be removing $955,466,531 of plant in connection with the nine Wind Repowering resources at issue in this docket. This compares to $826,831,696 in gross plant associated with the new, replacement property reported in the PacifiCorp's revenue requirement workpapers. Thus, the gross plant of the removals exceeds the gross plant of the replacements, and will produce an overall reduction to the gross plant of the nine resources following the Wind Repowering. I have summarized PacifiCorp's Response to AWEC Data Request 9 in Table 3, below.

Table 3
Unrecovered Net Book Value of Removals at Repowering Date
Per AWEC Data Request 9

Resource	Gross Plant	Depreciation Reserves	Undepreciated Net Book Value
Glenrock I	116,952,332	44,899,854	72,052,478
Seven Mile Hill I	131,382,281	46,539,318	84,842,963
Seven Mile Hill II	27,105,247	9,586,572	17,518,675
High Plains	145,932,412	51,308,936	94,623,476
McFadden Ridge	37,402,088	13,257,969	24,144,119
Leaning Juniper	107,016,060	45,289,711	61,726,349
Marengo I	167,445,463	71,696,920	95,748,543
Marengo II	86,385,845	34,956,430	51,429,415
Goodnoe Hills	135,844,803	50,836,563	85,008,240
Total	955,466,531	368,372,273	587,094,258

Note that these values are different than the values PacifiCorp reported in response to Staff Data Request 22 and will need to be reconciled.

Q. HOW WILL THIS RETIREMENT ACTIVITY IMPACT DEPRECIATION EXPENSES?

A. Since the gross plant of the nine wind resources will decline, the depreciation expense will also decline. Using the gross plant of removals AWEC Data Request 7, I estimate that actual depreciation expenses will decline by approximately $1,183,861 following the Wind Repowering. Support for this estimate may be found in my workpapers. Thus, PacifiCorp's proposal with respect to depreciation expense is unfair and asymmetrical. On the one hand, it states that depreciation expense for existing plant associated with the nine wind resources should be addressed in its pending depreciation study, but on the other it proposes to recover additional depreciation expenses of $7,609,560 from customers in this docket, even though the overall reduction to depreciation expense will be reflected on its books of account.

PacifiCorp's proposal will result in over-recovering depreciation expenses for the nine resources by approximately $8,793,421 per year. This difference between PacifiCorp's actual, lower depreciation expense associated with the nine wind resources and the higher amount it collects from customers will never be reconciled, resulting in a windfall to PacifiCorp.

Q. HOW WILL PACIFICORP'S ACCOUNTING PROPOSAL IMPACT THE ONGOING DEPRECIATION STUDY?

A. If the Commission were to use PacifiCorp's retirement accounting proposal of debiting the retired plant to deprecation reserves, recovery of the undepreciated net plant balances will not be considered in depreciation expenses until the effective date of the ongoing depreciation study. By reducing plant reserves for retirements, PacifiCorp's proposal will create a reserve imbalance, a shortfall that must be collected through higher depreciation accrual rates. The depreciation accrual rates, however, are only recalculated in the context of a depreciation study and PacifiCorp has not proposed adjusting the depreciation accrual rates in this docket. Thus, PacifiCorp will not accrue any incremental depreciation expenses for the reserve imbalance created from the removed property until new depreciation rates are established through UM 1968.

Q. ARE THERE BETTER METHODS FOR DEALING WITH THE PLANT REMOVALS?

A. Yes. It should be noted that the reduction to depreciation expenses discussed above is largely a byproduct of how PacifiCorp has proposed to handle the unrecovered investment of the equipment that will be removed. A more practical way for PacifiCorp to recover plant retired from service is through an ORS 757.140(2)(b) regulatory asset. Such an approach is well established in precedent and will allow PacifiCorp to receive the full return of the unrecovered investment in retired equipment immediately without having to recalculate depreciation accrual rates for wind equipment in the depreciation study.

Q. WHAT IS THE TYPICAL ACCOUNTING PRACTICE FOR PROPERTY REMOVED FROM SERVICE IN OREGON?

A. The statute governing utility retirement accounting for plant removed from service in Oregon may be found in ORS 757.140(2). Under the provisions of that statue, a utility is allowed to recover the undepreciated investment of a retirement in the following two circumstances:

> "(a) When the retirement is due to ordinary wear and tear, casualties, acts of God, acts of governmental authority; or
>
> (b) When the commission finds that the retirement is in the public interest."

Q. DOES THE PROPERTY REMOVED FOR THE REPOWERING PROJECT QUALIFY FOR RECOVERY UNDER ORS 757.140(2)?

A. AWEC recommends the Commission allow PacifiCorp to recover 100% of the unrecovered plant balances of property removed from service in the Wind Repowering program. This recommendation is contingent on the Commission determining that PacifiCorp's Wind Repowering project is prudent. Accordingly, subject to this caveat, AWEC does not oppose a finding that the removal of wind facilities as a part of the Repowering Program is in the public interest. This recovery, however, should occur through separate regulatory assets established pursuant to ORS 757.140(2)(b), rather than through the comingling of plant balances of the removed equipment with that of the new equipment.

Of note, the retirements involved with the removed equipment are unrelated to ordinary wear and tear, casualties, acts of God, acts of governmental authority, and thus, the Repowering Project would likely not qualify under ORS 757.140(2)(a).

Q. WHY IS THE USE OF AN ORS 757.140(2)(b) REGULATORY ASSET PREFERRED?

A. In addition to the issues surrounding the computation of deprecation expenses above, PacifiCorp's approach results in a situation where the rate base associated with the removed plant becomes difficult, if not impossible, to track. Once the amounts have been debited to accumulated depreciation reserves, it will not be possible to know, for instance, how much of the net rate base associated with the nine resources is attributable to the removed equipment and how much is attributable to the new equipment.

Q. WHAT AMORTIZATION METHOD DO YOU RECOMMEND FOR THE UNRECOVERED INVESTMENT?

A. I recommend using a sinking fund method for amortizing the regulatory asset balance, similar to the method the Commission recently adopted for amortizing Northwest Natural's outstanding pension balancing account balance.[15/] The sinking fund method is sometimes referred to as mortgage-style amortization. Basically, the sinking fund method takes an interest-accruing balance and converts the balance into a single levelized payment. The single levelized payment is calculated to compensate for all of the principal and interest accruals over the repayment period. I have further detailed this amortization proposal in Exhibits AWEC/104 and AWEC/105.

Q. WHAT AMORTIZATION PERIOD DO YOU RECOMMEND?

A. I recommend using an amortization period of seven or nine years, depending on the rate of return applied to the undepreciated balance. I have selected this range because it produces an amortization expense that is approximately equal to the current level of return on rate base and deprecation expenses that PacifiCorp is recovering in base rates for the property that will be

[15/] Re Northwest Natural Gas Company, dba NW Natural, Request for a General Rate Revision, Docket UG 344, Order No. 19-105 at 7-8 (Mar. 25, 2019); id., Exh. AWEC/900 at 3:10-4:8.

removed from service. My objective in establishing the amortization period was to set the regulatory asset recovery to be roughly equal to the current level of rate recovery, as doing so will promote rate stability.

Q. WHAT INTEREST RATE DID YOU USE?

A. In Exhibit AWEC/104, I used a modified blended treasury rate that is 100 basis points above the current 10-year treasury yields. This approach is standard practice for amortizing regulatory assets in Oregon. On April 1, 2019, 10-year treasury yields were approximately 2.49%.[16/] Thus I recommend a fixed interest rate of 100 basis points in excess of that rate or 3.49%.

In addition, I conducted a second analysis which has been detailed in Exhibit AWEC/105. That analysis is similar to the analysis in AWEC/104, except I used PacifiCorp's pre-tax ROR. Instead of increasing the amortization expense to compensate for the higher rate of return, however, I increased the amortization period to nine years.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATIONS RELATED TO DEPRECIATION EXPENSES AND ORS 757.140(2)(b)?

A. As can be seen in Exhibit AWEC/104 and AWEC/105, the recommendations I have outlined above produce a number of impacts on revenue requirement. First, I have removed from rate base the net plant of removed property, which I propose be tracked through the regulatory asset. Second, I remove the depreciation expense currently included in rates for the removed equipment. Third, I add back the amortization expense, which compensates for both the return on and return of the unrecovered plant, calculated using the parameters detailed above. Overall, these changes produce a modest increase to revenue requirement, relative to

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16/ Source Bloomberg. See https://www.bloomberg.com/quote/USGG10YR:IND

PacifiCorp's proposal. In AWEC/104, the net impact of these changes is a $496,067 increase to revenue requirement. Similarly, in AWEC/105, the net impact of these changes is a $547,423 increase to revenue requirement.

c. Phase-In Methodology

Q. IS PACIFICORP'S PROPOSAL TO PHASE IN RATES IN TWO INCREMENTS CONSISTENT WITH THE UM 1330 STIPULATION.

A. No. The UM 1330 Stipulation required RAC filings to be calculated over a single annual period and updated annually.[17] ICNU filed testimony supporting this provision, which the Commission cited in Order No. 07-572 approving the RAC.[18] PacifiCorp, on the other hand, proposes two step increases using two different annual periods of October 2019 through September 2020 and December 2019 through November 2020.

Q. DOES THE STIPULATION IN UE 339, PACIFICORP'S 2019 TAM, AUTHORIZE PACIFICORP'S PHASE-IN PROPOSAL?

A. No. The stipulation approved in that docket states that the "Stipulating Parties agree to recommend and support implementation of an expedited procedural schedule for the repowering RAC docket to allow the RAC rates to be effective by July 1, 2019. This term modifies the RAC schedule that calls for an April 1 filing with rates effective the following January. The July 1, 2019, rate effective date is contemporaneous with the expected in-service date for the first repowering project."[19] In its application, PacifiCorp has voluntarily extended the rate-effective period beyond July 1, 2019, to coincide with a later-than-anticipated in-service date for the first repowering projects. AWEC, as a Stipulating Party, has no objection

[17] Order No. 07-572, Appen. A at 2-4 ¶ 6.
[18] Order No. 07-572 at 7.
[19] Docket UE 339, Order No. 18-421, Appen. A at 4 ¶ 13 (Oct. 26, 2018).

to this extension, but does not consent to the two-step approach PacifiCorp takes for rate-effective dates, which the 2019 TAM stipulation did not contemplate.

Q. HOW DOES PACIFICORP COMBINE THE REVENUE REQUIREMENT OF THE TWO ANNUAL INCREASES?

A. To calculate the total revenue requirements for the two step increases, PacifiCorp simply added the revenue requirement numbers for the disparate periods together. The revenue requirements of the two disparate periods, however, are not additive because the costs of resources considered in the first step increase will have declined in the annual period used to establish the second step increase.

Q. WHAT DO YOU RECOMMEND?

A. When calculating the second rate increase for the annual period beginning December 1, 2019, I recommend PacifiCorp be required to recalculate the revenue requirement of the resources that were put into rates in the first rate increase so that a single annual period applies to this RAC filing.

Q. WHAT IS THE IMPACT OF THIS RECOMMENDATION?

A. I estimate the impact of this recommendation relative to PacifiCorp's filing is an approximate $140,579 reduction to the revenue requirement associated with the second rate increase. I calculated this by recalculating the revenue requirement of the October 1, 2019 resources over the period December 1, 2019 through November 30, 2020.

IV. GENERAL RATE CASE CONDITION

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THE GENERAL RATE CASE REQUIREMENTS OF DOCKET NO. UM 1330

A. Under the Stipulation in Docket No. UM 1330, parties agreed that the Commission could condition the approval of a RAC filing on the utility filing a general rate case within six months of the order date upon, among other things, a showing of good cause.[20] Given the tax reform savings that are still due to customers, I recommend the Commission include such a condition in its order in this docket.

Q. IS THERE GOOD CAUSE TO REQUIRE PACIFICORP TO FILE A RATE CASE WITHIN SIX MONTHS OF THE COMMISSION'S ORDER IN THIS CASE?

A. Yes. First, the RAC is single-issue ratemaking. Single-issue ratemaking occurs when utility rates are adjusted in response to a change in cost or revenue items considered in isolation. By considering an operating expense or rate base item in isolation, single-issue ratemaking ignores other factors that influence the utility's operating results, some of which could, if properly considered, move revenue requirements in the opposite direction from the single-issue change. From a ratemaking perspective, single-issue ratemaking is generally not preferred because it does not provide a holistic basis for considering cost recovery for the utility.

Q. DOES A UTILITY ALWAYS HAVE THE OPTION TO FILE A GENERAL RATE CASE?

A. Yes. Except possibly in cases where a utility voluntarily agrees not to file a rate case as part of a stipulation, utilities in Oregon always have the option to seek rate relief.

It may be true that there may be a lag between the timing of when the case is filed and the date that the new rates become effective. This appears to have been one of reasons for implementing the RAC to begin with. In Oregon, however, utilities may file rate cases using a future test period and have a number of tools to mitigate any perceived notion of regulatory lag.

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[20] Order No. 07-572, Appen, A at 7 ¶ 6.i.

Further, regulatory lag works in both directions. There are instances where regulatory lag is beneficial to a utility and detrimental to ratepayers. The case of zero fuel cost renewable resources is one such instance, as the facilities depreciate quickly after being placed into service, resulting in lower costs as time progresses.

Q. WHAT WOULD PACIFICORP'S OVERALL REVENUE REQUIREMENT BE IF IT WERE TO FILE A GENERAL RATE CASE?

A. In AWEC Data Request 4, PacifiCorp was asked if it considered the impact of any other costs that might offset the increase that it is proposing through the RAC. It confirmed it had not. In making its decision to file a RAC instead of a general rate case, it is likely that PacifiCorp compared the revenue implications of filing a general rate case to the revenue implications of filing a RAC.

Further, in Data Request AWEC 2 PacifiCorp was asked to provide its results for the year ending December 31, 2018. PacifiCorp said the data had not been prepared. AWEC also asked for results for the period ending June 2018, and PacifiCorp stated that it had not prepared results for this period either. The latest results that PacifiCorp was able to provide were for December 31, 2017, although results for the period ending December 31, 2018 should be available in early May 2019.

Q. DID YOU REVIEW THE DECEMBER 31, 2017 RESULTS OF OPERATIONS?

A. Yes. Based on the December 31, 2017 results PacifiCorp reported an actual Return on Equity of 12.23% and an adjusted Return on Equity of 9.81%. This compares with PacifiCorp's authorized return on equity of 9.8%.

Q. BASED ON THOSE RETURNS, WHAT DO YOU RECOMMEND?

A. When considering PacifiCorp's overall need for rate relief, one must also consider the material sums of money still outstanding from tax reform. As can be noted from the Staff Report in UM 1917, the sums still due to customers are material.[21/] This additional tax savings owed to customers is another reason why good cause exists to require PacifiCorp to file a rate case, so that these outstanding funds may be returned promptly. After considering that PacifiCorp is currently earning returns exceeding its authorized return on equity, it is apparent that ratepayers would more appropriately experience a rate reduction if PacifiCorp's costs were considered in a general rate case. Accordingly, I recommend PacifiCorp be required to file a general rate case, as the UM 1330 Stipulation authorizes.

Q. HAS PACIFICORP STATED THAT IT INTENDS TO FILE A RATE CASE SOON?

A. Yes. PacifiCorp has been very transparent about its plans to file a general rate case in 2020, for rates effective January 1, 2021. My recommendation in this case would align with this plan, so PacifiCorp should have no reason to oppose this recommendation. Currently, however, PacifiCorp has no obligation to file a rate case, so it is always possible that it may change its mind. Imposing a rate case filing requirement will ensure that the issues I address above will be resolved in a timely manner.

Q. DOES THIS CONCLUDE YOUR OPENING TESTIMONY?

A. Yes.

21/ In the Matter of PacifiCorp, dba Pacific Power, Application for Approval of Deferred Accounting Related to the Federal Tax Act, Docket No. UM 1917, Staff Report (Jan. 10, 2019).

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 352

In the Matter of	)
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PACIFICORP, dba PACIFIC POWER,	)
	)
2019 Renewable Adjustment Clause.	)
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EXHIBIT NO. AWEC/101

QUALIFICATION STATEMENT OF BRADLEY G. MULLINS

QUALIFICATION STATEMENT OF BRADLEY G. MULLINS

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS.

A. I have been performing independent utility consulting services on matters such as power costs, revenue requirement, rate spread and rate design for approximately five years, and have sponsored testimony in several regulatory jurisdictions, including before the Bonneville Power Administration. Previously, I worked at PacifiCorp as an analyst involved in power supply cost forecasting. I also previously worked at Deloitte, where I ultimately specialized in research and development tax incentives. I have a Master of Science degree in Accounting from the University of Utah.

Q. PLEASE PROVIDE A LIST OF YOUR REGULATORY APPEARANCES.

A. I have sponsored testimony in the following regulatory proceedings:

- <u>2020 Joint Power and Transmission Rate Proceeding,</u> Bonneville Power Administration, Case No. BP-20
- <u>In the Matter of the Application of MSG Las Vegas, LLC for a Proposed Transaction with a Provider of New Electric Resources, PUC Nv., Docket No. 18-10034</u>
- <u>Puget Sound Energy 2018 Expedited Rate Filing, Wa.UTC Dockets UE-180899/UG-180900 (Cons.)</u>
- <u>Georgia Pacific Gypsum LLC's Application to Purchase Energy, Capacity, and/or Ancillary Services from a Provider of New Electric Resources, PUC Nv. Docket No. 18-09015.</u>
- <u>Joint Application of Nevada Power Company d/b/a NV Energy for approval of their 2018-2038 Triennial Integrated Resource Plan and 2019-2021 Energy Supply Plan,</u> PUCN Docket No. 18-06003.
- <u>In re Cascade Natural Gas Corporation Request for a General Rate Revision,</u> Or.PUC, Docket No. UE 347.
- <u>In re Portland General Electric Company Request for a General Rate Revision,</u> Or.PUC Docket No UE 335.

- In re Northwest Natural Gas Company, dba NW Natural, Request for a General Rate Revision, Or.PUC Docket No. UG 344.

- In re Cascade Natural Gas Corporation Request for a General Rate Revision, Wa.UTC, Docket No. UE-170929.

- In the Matter of Hydro One Limited, Application for Authorization to Exercise Substantial Influence over the Policies and Actions of Avista Corporation, Or.PUC, Docket No. UM 1897.

- In re PacifiCorp, dba Pacific Power, 2016 Power Cost Adjustment Mechanism, Or.PUC, Docket No. UE 327.

- In re Avista Corporation 2018 General Rate Case, Wa.UTC Dockets UE-170485 and UG-170486 (Consolidated).

- Application of Nevada Power Company d/b/a NV Energy for authority to adjust its annual revenue requirement for general rates charged to all classes of electric customers and for relief properly related thereto, PUCN. Docket No. 17-06003.

- In re the Application of Rocky Mountain Power for Authority to Decrease Current Rates by $15.7 Million to Refund Deferred Net Power Costs Under Tariff Schedule 95 Energy Cost Adjustment Mechanism and to Decrease Current Rates By $528 Thousand Under Tariff Schedule 93, REC and SO2 Revenue Adjustment Mechanism, Wy. PSC, Docket No. 20000-514-EA-17 (Record No. 14696).

- In re the 2018 General Rate Case of Puget Sound Energy, Wa.UTC, Docket No. 170033 (Cons.).

- In re PacifiCorp, dba Pacific Power, 2018 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 323.

- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 319.

- In re Portland General Electric Company, Application for Transportation Electrification Programs, Or.PUC, UM 1811.

- In re Pacific Power & Light Company, Application for Transportation Electrification Programs, Or.PUC, Docket No. UM 1810.

- In re the Public Utility Commission of Oregon, Investigation to Examine PacifiCorp, dba Pacific Power's Non-Standard Avoided Cost Pricing, Or.PUC, Docket No. UM 1802.

- In re Pacific Power & Light Co., Revisions to Tariff WN U-75, Advice No. 16-05, to modify the Company's existing tariffs governing permanent disconnection and removal procedures, Wa.UTC, Docket No. UE-161204.
- In re Puget Sound Energy's Revisions to Tariff WN U-60, Adding Schedule 451, Implementing a New Retail Wheeling Service, Wa.UTC, Docket No. UE-161123.
- 2018 Joint Power and Transmission Rate Proceeding, Bonneville Power Administration, Case No. BP-18.
- In re Portland General Electric Company Application for Approval of Sale of Harborton Restoration Project Property, Or.PUC, Docket No. UP 334 (Cons.).
- In re An Investigation of Policies Related to Renewable Distributed Electric Generation, Ar.PSC, Matter No. 16-028-U.
- In re Net Metering and the Implementation of Act 827 of 2015, Ar.PSC, Matter No. 16-027-R.
- In re the Application of Rocky Mountain Power for Approval of the 2016 Energy Balancing Account, Ut.PSC, Docket No. 16-035-01
- In re Avista Corporation Request for a General Rate Revision, Wa.UTC, Docket No. UE-160228 (Cons.).
- In re the Application of Rocky Mountain Power to Decrease Current Rates by $2.7 Million to Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 and to Increase Rates by $50 Thousand Pursuant to Tariff Schedule 93, Wy.PSC, Docket No. 20000-292-EA-16.
- In re PacifiCorp, dba Pacific Power, 2017 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 307.
- In re Portland General Electric Company, 2017 Annual Power Cost Update Tariff (Schedule 125), Or.PUC, Docket No. UE 308.
- In re PacifiCorp, Request to Initiate an Investigation of Multi-Jurisdictional Issues and Approve an Inter-Jurisdictional Cost Allocation Protocol, Or.PUC, UM 1050.
- In re Pacific Power & Light Company, General rate increase for electric services, Wa.UTC, Docket No. UE-152253.
- In The Matter of the Application of Rocky Mountain Power for Authority of a General Rate Increase in Its Retail Electric Utility Service Rates in Wyoming of $32.4 Million Per Year or 4.5 Percent, Wy.PSC, Docket No. 20000-469-ER-15.

- In re Avista Corporation, General Rate Increase for Electric Services, Wa.UTC, Docket No. UE-150204.
- In re the Application of Rocky Mountain Power to Decrease Rates by $17.6 Million to Recover Deferred Net Power Costs Pursuant to Tariff Schedule 95 to Decrease Rates by $4.7 Million Pursuant to Tariff Schedule 93, Wy.PSC, Docket No. 20000-472-EA-15.
- Formal complaint of The Walla Walla Country Club against Pacific Power & Light Company for refusal to provide disconnection under Commission-approved terms and fees, as mandated under Company tariff rules, Wa.UTC, Docket No. UE-143932.
- In re PacifiCorp, dba Pacific Power, 2016 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 296.
- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 294.
- In re Portland General Electric Company and PacifiCorp dba Pacific Power, Request for Generic Power Cost Adjustment Mechanism Investigation, Or.PUC, Docket No. UM 1662.
- In re PacifiCorp, dba Pacific Power, Application for Approval of Deer Creek Mine Transaction, Or.PUC, Docket No. UM 1712.
- In re Public Utility Commission of Oregon, Investigation to Explore Issues Related to a Renewable Generator's Contribution to Capacity, Or.PUC, Docket No. UM 1719.
- In re Portland General Electric Company, Application for Deferral Accounting of Excess Pension Costs and Carrying Costs on Cash Contributions, Or.PUC, Docket No. UM 1623.
- 2016 Joint Power and Transmission Rate Proceeding, Bonneville Power Administration, Case No. BP-16.
- In re Puget Sound Energy, Petition to Update Methodologies Used to Allocate Electric Cost of Service and for Electric Rate Design Purposes, Wa.UTC, Docket No. UE-141368.
- In re Pacific Power & Light Company, Request for a General Rate Revision Resulting in an Overall Price Change of 8.5 Percent, or $27.2 Million, Wa.UTC, Docket No. UE-140762.
- In re Puget Sound Energy, Revises the Power Cost Rate in WN U-60, Tariff G, Schedule 95, to reflect a decrease of $9,554,847 in the Company's overall normalized power supply costs, Wa.UTC, Docket No. UE-141141.

- In re the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility Service Rates in Wyoming Approximately $36.1 Million Per Year or 5.3 Percent, Wy.PSC, Docket No. 20000-446-ER-14.

- In re Avista Corporation, General Rate Increase for Electric Services, RE, Tariff WN U-28, Which Proposes an Overall Net Electric Billed Increase of 5.5 Percent Effective January 1, 2015, Wa.UTC, Docket No. UE-140188.

- In re PacifiCorp, dba Pacific Power, Application for Deferred Accounting and Prudence Determination Associated with the Energy Imbalance Market, Or.PUC, Docket No. UM 1689.

- In re PacifiCorp, dba Pacific Power, 2015 Transition Adjustment Mechanism, Or.PUC, Docket No. UE 287.

- In re Portland General Electric Company, Request for a General Rate Revision, Or.PUC, Docket No. UE 283.

- In re Portland General Electric Company's Net Variable Power Costs (NVPC) and Annual Power Cost Update (APCU), Or.PUC, Docket No. UE 286.

- In re Portland General Electric Company 2014 Schedule 145 Boardman Power Plant Operating Adjustment, Or.PUC, Docket No. UE 281.

- In re PacifiCorp, dba Pacific Power, Transition Adjustment, Five-Year Cost of Service Opt-Out (adopting testimony of Donald W. Schoenbeck), Or.PUC, Docket No. UE 267.

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 352

In the Matter of	)
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PACIFICORP, dba PACIFIC POWER,	)
	)
2019 Renewable Adjustment Clause.	)
	)

EXHIBIT NO. AWEC/102

PACIFICORP RESPONSES TO DATA REQUESTS

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 002

AWEC Data Request 002

Please provide PacifiCorp's Oregon allocated results of operations for the 12 months ending December 31, 2018, including all supporting work papers in Excel format. If the results information is not yet available for that period, please provide PacifiCorp's Oregon allocated results of operations for the 12 months ending June 30, 2018.

Response to AWEC Data Request 002

PacifiCorp's Oregon allocated results of operations (ROO) for the 12 months ended December 31, 2018 has not yet been prepared. PacifiCorp does not prepare an Oregon allocated ROO for 12 month periods ending in June. The most recent available Oregon allocated ROO report would be for the 12 months ended December 31, 2017.

UE 352 / PacifiCorp
March 6, 2019
AWEC Request 002 – 1st Supplemental

AWEC Data Request 002

Please provide PacifiCorp's Oregon allocated results of operations for the 12 months ending December 31, 2018, including all supporting work papers in Excel format. If the results information is not yet available for that period, please provide PacifiCorp's Oregon allocated results of operations for the 12 months ending June 30, 2018.

1st Supplemental Response to AWEC Data Request 002

In response to AWEC's follow-up request for workpapers for the most recent available Oregon allocated results of operations report, please refer to Attachment AWEC 002 1st Supplement for models and workpapers supporting the company's 12 months ended December 2017 results of operations report filed in Oregon.

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 003

AWEC Data Request 003

Please identify the end of period net rate base and annual operating expenses associated with Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II for the years ending June 30, 2018 and December 31, 2018. Please provide detail for each plant separately.

Response to AWEC Data Request 003

Please refer to the company’s response to AWEC Data Request 002.

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 004

AWEC Data Request 004

Reference PAC/100, Lockey/4, at 8-19: When developing PacifiCorp's cost recovery proposal, did PacifiCorp review its operating results to consider the impact of changes to other operating costs and expenses that might offset the impact of the costs it seeks to recover through the RAC? If so, please provide work papers supporting the offsetting cost amounts, including the underlying results of operations.

Response to AWEC Data Request 004

Consistent with the requirements of Order No. 07-572, PacifiCorp looked at the incremental revenue requirement associated with the projects, and did not include other unrelated items that would either increase or decrease the Oregon revenue requirement.

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 005

AWEC Data Request 005

Reference PAC/100, Lockey/4 at 8-19: Did PacifiCorp use the final revenue requirement approved in Docket UE 263 as the basis for its proposed incremental cost recovery? If no, please identify the base over which the incremental revenue requirement was calculated and provide work papers supporting the calculation.

Response to AWEC Data Request 005

No. The incremental revenue requirement was calculated by comparing the forward-looking wind operating and capital costs with and without wind repowering. The incremental revenue requirement of these net amounts are provided in the exhibits accompanying the direct testimony of Steven R. McDougal, specifically Exhibit PAC/401, Exhibit PAC/402, Exhibit PAC/403, and Exhibit PAC/404.

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 007

AWEC Data Request 007

Reference PAC/100, Lockey/4 at 8-19: Please provide PacifiCorp's best estimate of the revenue requirement, excluding net variable power costs and production tax credits, associated with each of the following wind projects in PacifiCorp's last Oregon rate case, Docket UE 263: Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II. If PacifiCorp has made no such estimate, please provide the net rate base, and operating expenses, associated with each of the respective wind plants included in the final revenue requirement in Docket UE 263.

Response to AWEC Data Request 007

Revenue requirement in rate cases is not prepared at a location detail level. Please refer to Attachment AWEC 007 for a summary of total company unadjusted net plant balance and operating expenses of the wind plants requested, embedded in PacifiCorp's last Oregon general rate case, docket UE 263. Allocation factors and allocation percentages from the settlement Jurisdictional Allocation Model (JAM) are also provided. Please note that because only Glenrock I data is requested, only Glenrock I location level detail is provided, and the common assets between Glenrock I and Glenrock III have been excluded. Also excluded are transmission lines and communication equipment assets, as well as any associated Accumulated Deferred Income Tax (ADIT) balances associated with the specific facilities identified above.

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 008

AWEC Data Request 008

Reference PAC/100, Lockey/7 at 11-21: Please describe PacifiCorp's proposal for accounting for the old rotors, nacelles and blades that will be retired from service pursuant to PacifiCorp's repowering program

Response to AWEC Data Request 008

The rotors, nacelles, and blades are individual components that are being replaced, not retired. The accounting to remove the assets from PacifiCorp's books is to credit the cost of the asset in FERC Account 101 (Electric Plant in Service) and debit FERC Account 108 (Accumulated Depreciation Reserve). This will become part of the net book value (NBV) for the remaining assets at each respective wind facility, as per standard Federal Energy Regulatory Commission (FERC) utility accounting.

UE 352 / PacifiCorp
February 13, 2019
AWEC Request 009

AWEC Data Request 009

Please identify the gross plant of property, by FERC account, that will be retired pursuant to PacifiCorp's repowering program for each of the following wind facilities: Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II.

Response to AWEC Data Request 009

The gross plant of property identified below is not being retired, but rather individual components are being replaced.

Please refer to the table provided below:

Facility	Original value being Replaced	Estimated Accumulative Reserve at Repower Date	Estimated Net Book Replaced at Repower Date	Estimated Replacement Cost
Glenrock I	$116,952,332	$ (44,899,854)	$ 72,052,477	$ 1,479,000
Seven Mile Hill I	$131,382,281	$ (46,539,318)	$ 84,842,963	$ 1,683,000
Seven Mile Hill II	$ 27,105,247	$ (9,586,572)	$ 17,518,675	$ 331,500
High Plains	$145,932,412	$ (51,308,936)	$ 94,623,476	$ 1,683,000
McFadden Ridge	$ 37,402,088	$ (13,257,969)	$ 24,144,119	$ 484,500
Leaning Juniper	$107,016,060	$ (45,289,711)	$ 61,726,349	$ 2,010,000
Marengo I	$167,445,463	$ (71,696,920)	$ 95,748,543	$ 2,340,000
Marengo II	$ 86,385,845	$ (34,956,430)	$ 51,429,415	$ 1,170,000
Goodnoe Hills	$135,844,803	$ (50,836,563)	$ 85,008,240	$ 1,410,000

These assets will be credited from FERC Account 101 (Electric Plant in Service) and debited to FERC Account 108.

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 352

In the Matter of	)
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PACIFICORP, dba PACIFIC POWER,	)
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2019 Renewable Adjustment Clause.	)
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EXHIBIT NO. AWEC/103

IMPACT OF ACCUMULATED DEPRECATION ON RATE BASE

Estimated impact of accumulated depreciation accrued since UE 263

Resource	12/31/2017 Gross Plant*	Dep. Accr. Rate	Annual Dep. Accrual	Years of Accum.**	Reserves Accrued Since UE 263
Glenrock 1	364,690,105	3.42	12,472,402	5.75	71,716,309.11
Seven Mile Hill 2	122,653,319	3.35	4,108,886	5.75	23,626,095.48
Seven Mile Hill 2	122,653,319	3.35	4,108,886	5.75	23,626,095.48
High Plains	220,348,230	3.37	7,425,735	5.92	43,935,600.73
McFadden	56,524,839	3.37	1,904,887	5.92	11,270,581.93
Leaning Juniper	179,518,552	3.32	5,960,016	5.75	34,270,091.59
Marengo 1	244,803,367	3.37	8,249,873	5.92	48,811,751.36
Marengo 2	128,568,838	3.37	4,332,770	5.92	25,635,554.88
Goodnoe Hills	185,585,784	3.36	6,235,682	5.92	36,894,453.83
Total Company	1,625,346,352		54,799,138		319,786,534.39
Oregon SE%	26.05%		26.05%		26.05%
Oregon-Allocated	423,451,511		14,276,820		83,313,991
				Pre-Tax ROR:	9.24%
Estimated Revenue Requirement Impact of Reserves Accrued Since UE 263:					**7,701,614**

* Source: 2018 Depreciation Study. For sites with multiple locations, the plant balances were split between locations using the book value of removals reported in OPUC 22.
** Based on December 31, 2013 rate base valuation in UE 263

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 352

In the Matter of	)
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PACIFICORP, dba PACIFIC POWER,	)
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EXHIBIT NO. AWEC/104

ORS 757.140(2) REGULATORY ASSET AMORTIZATION

Amortization schedule for ORS 757.140(2)(b) regulatory asset at MBT rate

Wind Repowering Property Removed From Service:	
Net Book Value	587,094,258
Oregon SE	26.05%
Oregon-Allocated	152,955,677
Pre-Tax ROR	9.24%
Return on Rate Base in Rates	14,139,349

Amortization Schedule

MBT Rate: 3.49%

Amort. Year	Beg. Bal	Amortization	Interest	End Balance
1	152,955,677	(24,576,858)	4,909,287	133,288,106
2	133,288,106	(24,576,858)	4,222,889	112,934,136
3	112,934,136	(24,576,858)	3,512,535	91,869,814
4	91,869,814	(24,576,858)	2,777,390	70,070,346
5	70,070,346	(24,576,858)	2,016,589	47,510,077
6	47,510,077	(24,576,858)	1,229,236	24,162,454
7	24,162,454	(24,576,858)	414,403	0

Net Revenue Requirement Impact of Amortization Proposal	
Remove Unrecovered Plant From Rate Base	(14,139,349)
Adjust Depreciation Expense For Retirements (OPUC 22)	(9,941,442)
Add ORS 757.140(2)(b) Regulatory Asset Amortization	24,576,858
Net Revenue Requirement Impact	496,067

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UE 352

In the Matter of	)
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PACIFICORP, dba PACIFIC POWER,	)
	)
2019 Renewable Adjustment Clause.	)
	)

EXHIBIT NO. AWEC/105

ORS 757.140(2) REGULATORY ASSET AMORTIZATION USING ROR

Amortization schedule for ORS 757.140(2)(b) regulatory asset at RoR

Wind Repowering Property Removed From Service:	
Net Book Value	587,094,258
Oregon SE	26.05%
Oregon-Allocated	152,955,677
Pre-Tax ROR	9.24%
Return on Rate Base in Rates	14,139,349

Amortization Schedule

Pre-tax ROR 9.24%

Amort. Year	Beg. Bal	Amortization	Interest	End Balance
1	152,955,677	(24,628,214)	13,001,023	141,328,485
2	141,328,485	(24,628,214)	11,926,196	128,626,467
3	128,626,467	(24,628,214)	10,752,011	114,750,264
4	114,750,264	(24,628,214)	9,469,283	99,591,333
5	99,591,333	(24,628,214)	8,067,979	83,031,098
6	83,031,098	(24,628,214)	6,537,137	64,940,021
7	64,940,021	(24,628,214)	4,864,783	45,176,590
8	45,176,590	(24,628,214)	3,037,835	23,586,211
9	23,586,211	(24,628,214)	1,042,003	(0)

Net Revenue Requirement Impact of Amortization Proposal	
Remove Unrecovered Plant From Rate Base	(14,139,349)
Adjust Depreciation Expense For Retirements (OPUC 22)	(9,941,442)
Add ORS 757.140(2)(b) Regulatory Asset Amortization	24,628,214
Net Revenue Requirement Impact	547,423