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June 3, 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 redacted version of the Rebuttal and Cross-Answering Testimony and Exhibits of Bradley G. Mullins on behalf of the Alliance of Western Energy Consumers ("AWEC") in the above-referenced docket.

Please note that Exhibits AWEC/201 and AWEC/205 contain protected information and are being handled in accordance with the general protective order issued in this proceeding. The confidential portions of AWEC’s filing will follow to the Commission via Federal Express.

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 confidential pages of the Rebuttal and Cross-Answering Testimony and Exhibits of Bradley G. Mullins upon the parties shown below via U.S. Mail, postage prepaid, and by posting to the Huddle workspace in this docket.

Dated at Portland, Oregon, this $3^{\text {rd }}$ day of June, 2019.
Sincerely,
/s/ Jesse O. Gorsuch
Jesse O. Gorsuch

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## BEFORE THE

## PUBLIC UTILITY COMMISSION OF OREGON

UE 352
In the Matter of )
PACIFICORP, dba PACIFIC POWER,
)

- )

2019 Renewable Adjustment Clause.

REBUTTAL AND CROSS-ANSWERING TESTIMONY OF BRADLEY G. MULLINS ON BEHALF OF THE ALLIANCE OF WESTERN ENERGY CONSUMERS

June 3, 2019

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## EXHIBIT LIST

Confidential AWEC/201 - Declining Rate Base: UE 263 to Repowering Dates
AWEC/202 - ORS 757.140(2) Regulatory Asset Amortization AWEC/203 - ORS 757.140(2) Regulatory Asset Amortization Using RoR AWEC/204 - ORS 757.140(2) Regulatory Asset Amortization with 20-yr. Amort. Period Confidential AWEC/205 - PacifiCorp Responses to Data Requests

## 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. ARE YOU THE SAME WITNESS WHO SUBMITTED OPENING TESTIMONY IN THIS DOCKET?

A. Yes. I filed Opening Testimony on behalf of the Alliance of Western Energy Consumers ("AWEC").

## Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL AND CROSS-ANSWERING TESTIMONY?

A. I respond to PacifiCorp's Reply Testimony, filed on May 8, 2019.
Q. PLEASE SUMMARIZE YOUR TESTIMONY.
A. In Opening Testimony, I recommended the Commission require PacifiCorp to update the rate base balances for the nine renewable resources at issue in this Renewable Adjustment Clause ("RAC") proceeding (the "Repowering Resources") ${ }^{1 /}$ to the actual plant balances as of October 1, 2019, and December 1, 2019, the dates PacifiCorp has requested new rates be effective in this RAC (the "Repowering Dates"). I also recommended the Commission adopt a regulatory accounting framework under ORS $757.140(2)(\mathrm{b})$ to provide PacifiCorp with full recovery of the undepreciated net book value of equipment removed from service due to repowering. While PacifiCorp did not agree to these recommendations in Reply Testimony, it also did not dispute the facts underlying my recommendations. As discussed below, therefore, I continue to support these two recommendations.
$1^{1 /} \quad$ The nine resources at issue 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.

## Q. HAVE YOU CALCULATED THE RATE IMPACT OF YOUR RECOMMENDATIONS?

A. Yes. My Opening Testimony provided an estimate of the rate impact of the two recommendations summarized above because PacifiCorp had not provided sufficient information to calculate a precise number. After further discovery, PacifiCorp provided the necessary information and it became possible to precisely calculate the revenue requirement impacts of these two recommendations, which I have detailed in Table 1R, below:

TABLE 1R
Impact of AWEC Recommendations
Whole Dollars

## Adjustments:

Declining Rate Base of Repowering Resources

Accum. Dep
Deferred Taxes
$(8,643,474)$

Net Capital Additions
Subtotal
822,273
1,535,510
$(6,285,690)$

## Regulatory Accounting for Removed Equipment

Remove Return On Rate Base
Remove Depreciation Expense
Add Regulatory Asset Amortization
Subtotal

Adjusted Revenue Requirement
\$ 25,960,713

Confidential Exhibit AWEC/201 details the change in rate base for the nine Repowering Resources since PacifiCorp’s last general rate case, Docket UE 263, including accumulated depreciation, net capital additions and accumulated deferred income taxes. To be clear, this adjustment is intended to apply to all plant associated with the wind facilities, not
just the plant being removed. As discussed in detail in my Opening Testimony, the RAC is single-issue ratemaking defined in terms of scope by a renewable resource, so it is appropriate to consider the revenue requirement of all aspects of the renewable resource, including the tower and fixtures that are not being removed from service.

Further, Exhibits AWEC/202 and AWEC/203 detail the impact of using regulatory accounting under ORS 757.140(2)(b) to provide PacifiCorp with full recovery of the unrecovered plant balances associated with removed equipment. To clarify, my proposal is to use the sinking fund method and to set the regulatory asset amortization equal to the return of and return on associated with the removed equipment embedded in base rates. Table 1R, above, details the impact of removing the return of and return on, as well as the offsetting increase for amortization expense. This ratemaking treatment will produce no immediate revenue requirement impact relative to PacifiCorp's revenue requirement proposal, but will ensure that ratepayers get full credit for the amounts that ratepayers are contributing towards repaying PacifiCorp's investment in the Repowering Resources.

## II. DECLINING RATE BASE OF RENEWABLES

## Q. WHAT ISSUE DID YOU RAISE IN OPENING TESTIMONY REGARDING ACCUMULATED DEPRECIATION?

A. In Opening Testimony, I noted that the overall rate base for the Repowering Resources has declined materially since last considered in rates due to the simple fact that the resources have depreciated over time. PacifiCorp's most recent general rate case, Docket UE 263, used a rate base valuation period corresponding to the year ending December 31, 2013, which is the basis for the amounts ratepayers presently pay in base rates. New RAC rates are to become effective on October 1, 2019, and December 1, 2019, and at that time the overall rate base associated
with the nine Repowering Resources will be materially lower than it was in the Docket UE 263 rate base valuation period. In Confidential Exhibit AWEC/201, I show this difference based upon supplemental discovery from PacifiCorp, including the impacts of ADIT and capital additions.

## Q. DID PACIFICORP DISPUTE THAT THE RATE BASE OF THE REPOWERING RESOURCES HAS DECLINED?

A. No. PacifiCorp's response on this issue may be found at PAC/900, Page 8, Line 5 through Page 10, Line 9. PacifiCorp acknowledges that the rate base balances associated with the Repowering Resources have declined since the Docket UE 263 rate base valuation period. PacifiCorp did not agree, however, to account for the lower rate base of the Repowering Resources in this case.

PacifiCorp argues that it should be entitled to retain the benefits associated with the declining rate base of the Repowering Resources based on the following arguments: (1) AWEC "selectively reset" the rate base balances of the Repowering Resources by failing to account for past capital additions and accumulated deferred income taxes $; \underline{2 /}$ (2) accounting for accumulated depreciation for the Repowering Resources exceeds the scope of the RAC and belongs in a general rate case; ${ }^{3 /}$ (3) AWEC's adjustment is overstated because it includes accumulated depreciation associated with plant from the Repowering Resources that is not being removed;4/ and (4) AWEC's adjustment constitutes a "true-up" of past costs that violates the rule against retroactive ratemaking. ${ }^{5 /}$

[^0]UE 352 - Rebuttal and Cross-Answering Testimony of Bradley G. Mullins

Additionally, considering the declining rate base in the RAC, PacifiCorp argues, would "effectively penalize[] the company for pursuing wind repowering." I disagree. There is nothing punitive, selective, or retroactive about updating the rate base balances for the nine Repowering Resources; there is no true-up involved. On the contrary, the lower rate base means that the overall cost of Repowering Resources has declined since UE 263, and not considering this reduced cost would represent a penalty to ratepayers, not the other way around.

## Q. DID YOU "SELECTIVELY RESET" THE RATE BASE BALANCES OF THE REPOWERING RESOURCES?

A. No. My Opening Testimony only contained an estimate of the impact of declining rate base using the depreciation parameters approved in the 2013 Depreciation Study. I acknowledged it was an estimate because PacifiCorp had not provided the necessary rate base balances, including past capital additions and ADIT, when first requested. PacifiCorp argued that the UE 263 rate base balances were irrelevant, or could not be calculated. It was only through multiple rounds of discovery that PacifiCorp ultimately provided the rate base information, including capital additions and ADIT, necessary to determine the amount the rate base has declined for the Repowering Resources since UE 263. That additional information has been detailed in Exhibit AWEC/201, and includes the capital additions and accumulated deferred income taxes that PacifiCorp said I ignored.

## Q. PLEASE SUMMARIZE EXHIBIT AWEC/201.

A. Exhibit AWEC/201 details the rate base of the nine Repowering Resources as of UE 263 and as of the respective Repowering Dates. It shows that, on the Repowering Dates, the rate base valuation of the Repowering Resources will have declined by $\$ 72,742,445$ on an Oregon-
allocated basis. This amounts to a revenue requirement reduction of $\$ 6,724,372$ relative to the revenues PacifiCorp is currently collecting for the resources.

The amounts in Exhibit AWEC/201 are from additional discovery AWEC conducted, requesting the plant balances for the Repowering Resources in PacifiCorp’s 2018 Results of Operations, as well as additional information related to accumulated deferred income taxes and capital additions.

On Page 1, I detail the rate base balances of the nine Repowering Resources from Docket No. UE 263. PacifiCorp provided the gross plant and accumulated depreciation balances in response to AWEC Data Request 17, which is included in Exhibit AWEC/205. The ADIT balances were provided in response to AWEC Data Request 18, also included in Exhibit AWEC/205. Based upon these values, the Oregon-allocated rate base valuation for the nine Repowering Resources in UE 263 was $\$ 221,046,066$. Note that the plant balances for common plant were split between the respective resources based upon the nameplate capacity of the resources. Using PacifiCorp's post-tax-reform cost of capital, this corresponds to a revenue requirement of $\$ 20,0433,681$, effectively the overall return on rate base PacifiCorp is currently collecting from ratepayers for the nine Repowering Resources.

On Page 2, I detail the rate base balances of the Repowering Resources included in PacifiCorp’s 2018 Oregon Results of Operations. PacifiCorp provided this data in response to AWEC Data Request 12, included in Exhibit AWEC/205. As can be seen, on December 31, 2018, the rate base of the nine facilities had declined to $\$ 157,195,578$. Thus, based on the 2018 Results of Operations, the rate base of the nine Repowering Resources had declined by $29 \%$ since UE 263, equating to a reduced revenue requirement of $\$ 5,902,392$.

Finally, on Page 3, I detail the rate base balances of the nine resources as of the respective Repowering Dates of October 1, 2019, and December 1, 2019. I forecast the incremental accumulated depreciation, capital additions and deferred taxes that will accrue on the Repowering Resources over the additional 9- or 11-month period from the 2018 Oregon Results of Operations, depending on the resource. As can be seen, rate base for the nine Repowering Resources will decline further over this period. Thus, as of the Repowering Dates, the rate base of the nine Repowering Resources will have declined by 33\%, equating to a revenue requirement reduction of $\$ 6,285,690$ on an Oregon-allocated basis.

## Q. DOES YOUR PROPOSAL EXCEED THE SCOPE OF THIS CASE?

A. No. To the contrary, my proposal ensures that rates established in this RAC proceeding are fair and reasonable. Contrary to being a "selective" adjustment, as PacifiCorp alleges, it is PacifiCorp's proposal to focus only on increases to costs associated with the Repowering Resources that is selective. If PacifiCorp is allowed to change rates to reflect changes to the cost of the wind resources it is repowering, then those rates should accurately reflect the overall cost of those resources at the time RAC rates are effectuated. That is the fundamental principle behind AWEC's recommendation to account for the declining rate base of these renewables.

## Q. DOES INCLUDING BOTH THE REPLACED AND NON-REPLACED PLANT BALANCES IN YOUR CALCULATION OVERSTATE YOUR ADJUSTMENT?

A. No. PacifiCorp summarily states that "[ $t]$ he non-replaced wind equipment is not impacted by wind repowering and there is no principled basis for including it." Notwithstanding, the principled basis for considering all costs associated with a renewable resource was described both in my Opening Testimony and in the testimony supporting the stipulation in UM 1330
that established the RAC ("RAC Stipulation"). ${ }^{6 /}$ To reiterate, the RAC is single-issue ratemaking that is defined within the context of a renewable resource; therefore, all costs associated with the renewable resource are appropriately considered within a RAC, whether replaced or not.

## Q. ARE YOU PROPOSING TO "TRUE-UP" ACCUMULATED DEPRECIATION, AS PACIFICORP ALLEGES?

A. No. PacifiCorp's suggestion that AWEC is proposing to "true-up" past depreciation expenses is also a plain mischaracterization of my Opening Testimony. A true-up would involve a historical review of each year 2014 through 2018, to determine the benefit associated with the declining rate base for each year. That is not what AWEC is proposing. A true-up of historical accumulated depreciation would be a significantly larger adjustment. It is true, however, that PacifiCorp has historically realized material benefits due to the declining rate base of renewable resources.

6/ AWEC/100, Mullins/9:10-10:11; Docket No. UM 1330, Order No. 07-572, Appen. A at 4 (specifying that RAC rates are to include "the return of and grossed up return on costs of the renewable energy source" (emphasis added)); Docket No. UM 1330, Joint Parties/100 at 6:4-6 (describing the stipulation requirement that RAC rates be updated annually 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" (emphasis added)).

TABLE 2R
PacifiCorp Over Recovery of Return on Repowering Resources 2014 through 2018 (\$000)

|  | UE 263 (2013) | 2014 | 2015 | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gross Plant | 1,497,512 | 1,501,725 | 1,505,937 | 1,510,150 | 1,514,363 | 1,518,575 |
| Accum. Dep. | $(234,918)$ | $(285,332)$ | $(335,888)$ | $(386,586)$ | $(461,134)$ | $(535,683)$ |
| ADIT | $(414,147)$ | $(407,222)$ | $(400,298)$ | $(393,373)$ | $(386,449)$ | $(379,524)$ |
| Rate Base | 848,448 | 809,171 | 769,752 | 730,191 | 666,780 | 603,368 |
| SG | 26.05\% | 26.05\% | 26.05\% | 26.05\% | 26.05\% | 26.05\% |
| Oregon | 221,046 | 210,813 | 200,543 | 190,237 | 173,716 | 157,196 |
| Rev. Req. @ 10.77\%* | 23,807 | 22,705 | 21,599 | 20,488 | 18,709 | 16,930 |
| UE 263 Revenues | 23,807 | 23,807 | 23,807 | 23,807 | 23,807 | 23,807 |
| Hist. Over-Recovery | - | 1,102 | 2,208 | 3,318 | 5,097 | 6,877 |
| Total Over-recovery 2014-2018 |  |  |  |  |  | 18,603 |
| * Pretax return before tax reform |  |  |  |  |  |  |

As noted in Table 2R, PacifiCorp has historically over-recovered the return on rate base for the nine Repowering Resources by approximately $\$ 18.6$ million over the five-year period 2014 through 2018. AWEC's adjustment, however, is not requesting that the Commission refund those historical amounts. Rather, AWEC's adjustment only applies on a going-forward basis, applying the impact of declining rate base beginning on the respective Repowering Dates.

## Q. DOES YOUR ADJUSTMENT CONSTITUTE RETROACTIVE RATEMAKING?

A. No. There is nothing retroactive about updating the plant balances for renewable resources reflected in rates on a going-forward basis. If there were, any rate case in which plant balances are updated would constitute retroactive ratemaking. In effect, depreciation would cease to exist in ratemaking. To be clear, AWEC is not proposing to change any past rates or the past impact of past proceedings.

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## Q. PLEASE SUMMARIZE YOUR RECOMMENDATION RELATED TO ACCUMULATED DEPRECIATION.

A. PacifiCorp does not dispute that the rate base balances for the Repowering Resources have declined and presents no valid argument for why it is appropriate for PacifiCorp to retain the benefit associated with the declining rate base while simultaneously increasing rates through the RAC. If new rates from this proceeding do not reflect the accumulated depreciation of the Repowering Resources since the last time they were considered in rates, customers will overpay for these resources. This would be inconsistent with the Commission's obligation to ensure customers pay fair and reasonable rates.

## III. ORS 757.140(2)(B) REGULATORY ACCOUNTING

## Q. PLEASE SUMMARIZE YOUR REGULATORY ACCOUNTING PROPOSAL.

A. In Opening Testimony, I recommended moving recovery of unrecovered net plant balances of removed equipment into an ORS 757.140(2)(b) regulatory asset. ${ }^{7 /}$ I also argued for setting the level of amortization expense equal to the level of return on and return of rate base currently embedded in rates for the removed equipment on the basis that this would promote rate stability. ${ }^{8 /}$ I also proposed that the regulatory asset be amortized using the sinking fund method and offered two alternatives, one that applied a carrying charge of $3.94 \%$, equivalent to a modified blended treasury rate to reflect the time value of money, and one that applied a carrying charge of $9.24 \%$, which is PacifiCorp's currently authorized pre-tax rate of return. ${ }^{\text {9/ }}$

## Q. DID PACIFICORP OBJECT TO USING REGULATORY ACCOUNTING?

A. Not necessarily. PacifiCorp acknowledged that establishing a regulatory asset with a sinking fund "could properly compensate PacifiCorp for both the return of and return on the unrecovered investment," as long as a carrying charge of 9.24 percent is used. ${ }^{10 /}$ Notwithstanding, PacifiCorp continues to have a preference for using its proposed accounting method of transferring the gross book value of the removed equipment between FERC accounts.

## Q. IS PACIFICORP'S ACCOUNTING APPROACH FAIR TO RATEPAYERS?

A. As explained in my Opening Testimony, PacifiCorp’s approach does not account for reduced depreciation expense it will experience as a consequence of replacing old equipment with new equipment. Under PacifiCorp's proposal, it will recover its investment in the new repowering equipment at current depreciation rates and, simultaneously, will also continue to recover the depreciation expense associated with the replaced equipment that was set in its last general rate case. This would result in a windfall to PacifiCorp because applying the unrecovered plant balances to accumulated depreciation will result in an immediate reduction to depreciation expense in the amount of $\$ 8,793,421$ per year. PacifiCorp, however, is not proposing to reduce revenue requirement for the reduction to depreciation expense that will result from its accounting proposal until new depreciation rates are effective, thus allowing it to keep all of the benefits of this reduced depreciation expense until then.

[^1]
## Q. HOW DOES YOUR PROPOSAL ADDRESS THIS FLAW IN PACIFICORP'S APPROACH?

A. My proposal addresses this problem by transferring the removed equipment into a regulatory asset at its net book value as of the Repowering Dates (thus accounting for accumulated depreciation), and amortizing the regulatory asset by an amount equal to the current level of revenue requirement associated with the removed equipment. As can be seen in Table 1R, above, this proposal is designed to have no incremental impact on revenue requirement. Notwithstanding, ratepayers will benefit over time because they will get full credit for the amounts they are paying for the removed equipment as the regulatory asset is amortized.

## Q. DOES PACIFICORP DISPUTE THAT ITS PROPOSAL WILL RESULT IN IT OVERRECOVERING DEPRECIATION EXPENSE?

A. No. PacifiCorp does not dispute that its proposal will result in PacifiCorp over-recovering depreciation expense. PacifiCorp simply argues that adjusting depreciation expense for the Repowering Resources should be done in its depreciation case. However, PacifiCorp requested, and was granted, a stay in that case and, therefore, if depreciation expense for the Repowering Resources is not adjusted in this case, it will result in a windfall to PacifiCorp until those rates are updated. ${ }^{11 /}$ As with accumulated depreciation, the Commission should ensure that the revenue requirement for the Repowering Resources accurately reflects the true costs of those resources once they are revalued in rates through this RAC proceeding. This involves not only adjusting rate base to account for accumulated depreciation on the Repowering Resources, but also accurately reflecting depreciation expense associated with these resources. Use of a regulatory asset to provide recovery of the equipment removed from service accomplishes this goal.

11 $\quad$ Docket UM 1968, ALJ Ruling (Feb. 15, 2019).

## Q. WHY IS THE USE OF A SINKING FUND METHOD APPROPRIATE?

A. Because the removed equipment is no longer productive, use of a straight-line method of amortization will result in PacifiCorp over-recovering the cost of removed equipment. This is a similar concept illustrated in the hypothetical true-up of depreciation expense for the Repowering Resources, as shown in Table 2R, above. PacifiCorp will continue to recover the same level of depreciation expense associated with the removed equipment until that expense is revalued in a rate case, giving it the benefits of regulatory lag on the back end. While this is common and may be appropriate for plant that remains in service, it is not appropriate for plant that is no longer being used to serve ratepayers. PacifiCorp is no longer obligated to make ongoing capital investments or bear any risk with respect to the removed equipment, and accordingly, using a sinking fund method is a more equitable approach than straight-line in these circumstances.

## Q. DID PACIFICORP RAISE ANY OTHER CONCERNS WITH YOUR REGULATORY ASSET PROPOSAL?

A. Yes. PacifiCorp alleges that I "incorrectly calculated interest in [my] amortization schedule," ${ }^{12 /}$ and that a nine-year amortization period (assuming a 9.24\% carrying charge) will not provide PacifiCorp with full cost recovery and will increase rates. ${ }^{13 /}$

## Q. DO YOU AGREE THAT YOUR INTEREST CALCULATION CONTAINS AN ERROR?

A. No. I calculated the interest compounded on an annual basis, assuming the payment made, and interest accrued, in the middle of the annual period. PacifiCorp's analysis in PAC/901, however, suggests that the interest payment should be based on the average of the beginning

[^2]and ending balance, including the incremental interest accrued over the period. Such an approach is flawed, however, because the ending balance already includes the additional interest accruals PacifiCorp is attempting to calculate. PacifiCorp's proposed correction effectively double-counts a portion of interest because it assumes interest accrues on interest that is accruing in the same time interval. That is not AWEC's amortization proposal. Notwithstanding, compounding interest on a monthly basis is not unreasonable, so I have incorporated that into my recommendation in Exhibits AWEC/202 and AWEC/203. As AWEC/202 and AWEC/203 show, the amortization period compounding interest monthly is either 88 months ( 7 years, 4 months) or 117 months ( 9 years, 9 months), depending on the interest rate used.

## Q. DID PACIFICORP DISPUTE OTHER ASPECTS OF YOUR AMORTIZATION PROPOSAL?

A. No. When setting the amortization level equal to the return on and return of the removed equipment in rates, I relied directly on information provided by the Company. For example, PacifiCorp provided the unrecovered net book value of removed equipment in response to AWEC Data Request 09. The depreciation expense of the removed equipment was provided in response to Staff Data Request 22. PacifiCorp did not dispute these amounts.

## Q. WHY DOES PACIFICORP STATE THAT AN AMORTIZATION PERIOD CLOSER TO 20 YEARS IS NECESSARY?

A. It is not clear. In Reply Testimony, PacifiCorp did not provide any analytical support for a 20year amortization period, so it is not known whether PacifiCorp's suggestion for a 20-year amortization period was illustrative or based off a specific calculation.

In fact, as Exhibit AWEC/204 demonstrates, if such a long amortization period were used, it will result in an amortization expense that is significantly less than the amount of
recovery currently embedded in rates. Using the parameters identified in AWEC/204, a 20year amortization amounts to an amortization of $\$ 10,620,103$, which is materially less than the $\$ 24,080,791$ of revenue requirement associated with the removed equipment embedded in rates. Accordingly, use of a 20-year amortization period would require an additional $\$ 13,460,688$ reduction to the RAC revenue requirement.

## IV. RATE CASE REQUIREMENT

## Q. DID PACIFICORP OBJECT TO FILING A RATE CASE IN IN SIX MONTHS?

A. Yes. In my Opening Testimony, I recommended that the Commission require PacifiCorp to file a rate case within six months after this RAC is concluded. PacifiCorp stated that it intends to file a rate case anyway, although not necessarily within six months. ${ }^{14 /}$

## Q. WHAT DO YOU RECOMMEND?

A. I continue to recommend the Commission condition its order on PacifiCorp filing a rate case, although I believe it is reasonable to give PacifiCorp additional time to file within nine months of the date of the final order in this docket.

## V. PHASE-IN APPROACH

## Q. ARE YOU CONTINUING TO PROPOSE AN ADJUSTMENT FOR THE PHASE-IN PERIOD?

A. No. In Opening Testimony, I proposed a minor adjustment to update the rate base associated with the October 1, 2019 Repowering Resources for the second rate period. After reviewing PacifiCorp's testimony, I agree that this adjustment is not necessary. Since the first rate

[^3]UE 352 - Rebuttal and Cross-Answering Testimony of Bradley G. Mullins
increase was calculated as an annual increase, but applied only for two months, an additional adjustment is not necessary.

## Q. SHOULD THE PLANT BALANCES FOR ALL RESOURCES BE RECALCULATED NEXT YEAR?

A. Yes. As discussed above, the RAC Stipulation requires that costs be updated annually until PacifiCorp files a rate case. Accordingly, if PacifiCorp makes a RAC filing for the remaining Repowering Resources next year, it should be offset by the accumulated depreciation accrued with respect to the nine wind facilities at issue in this proceeding.
Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
A. Yes.

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON 

UE 352
In the Matter of
PACIFICORP, dba PACIFIC POWER, 2019 Renewable Adjustment Clause.

EXHIBIT AWEC/201

DECLINING RATE BASE: UE 263 TO REPOWERING DATES (REDACTED VERSION)

|  | UE 263 (AWEC DR 17 and 18) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Accum. | ADIT | Rate |
| Resource | Gross Plant | Depr. |  | Base |
| Glenrock 1 | 212,723 |  |  | 123,503 |
| Seven Mile Hill 2 | 202,100 |  |  | 118,331 |
| Seven Mile Hill 2 | 46,340 |  |  | 28,178 |
| High Plains | 225,373 |  |  | 136,066 |
| McFadden | 58,354 |  |  | 35,284 |
| Leaning Juniper | 179,052 |  |  | 88,962 |
| Marengo 1 | 245,805 |  |  | 128,945 |
| Marengo 2 | 135,474 |  |  | 78,571 |
| Goodnoe Hills | 192,290 |  |  | 110,607 |
| Total Company | 1,497,512 | $(234,918)$ | $(414,147)$ | 848,448 |
| Oregon SG | 26.05\% | 26.05\% | 26.05\% | 26.05\% |
| Oregon Allocated | 390,147 | $(61,203)$ | $(107,898)$ | 221,046 |
| Pre-tax ROR | 9.24\% | 9.24\% | 9.24\% | 9.24\% |
| Return on Rate Base | 36,066 | $(5,658)$ | $(9,974)$ | 20,434 |

Resource

Glenrock 1
Seven Mile Hill 2
Seven Mile Hill 2
High Plains
McFadden
Leaning Juniper
Marengo 1
Marengo 2
Goodnoe Hills

Total Company

Oregon SG

Oregon Allocated

Pre-tax ROR

Return on Rate Base

| 2018 ROO |
| ---: |
| Gross Plant |
| $-----------------17,550$ |
| 204,202 |
| 47,486 |
| 226,053 |
| 58,529 |
| 183,391 |
| 249,219 |
| 136,702 |
| 195,442 |

1,518,575

| Accum. |
| :---: |
| Depr. |
| ------------- |
| $(73,509)$ |
| $(68,520)$ |
| $(15,214)$ |
| $(72,560)$ |
| $(18,852)$ |
| $(73,659)$ |
| $(98,760)$ |
| $(49,558)$ |
| $(65,052)$ |
| ----------------1 |

$(535,683)$
26.05\%
$(139,561)$
9.24\%
$(12,901)$

| ADIT | Rate |
| :---: | :---: |
|  | Base |
| $(54,275)$ | 89,766 |
| $(50,714)$ | 84,968 |
| $(10,545)$ | 21,727 |
| $(61,363)$ | 92,130 |
| $(15,069)$ | 24,609 |
| $(47,156)$ | 62,577 |
| $(62,627)$ | 87,831 |
| $(29,565)$ | 57,580 |
| $(48,211)$ | 82,180 |
| $(379,524)$ | 603,368 |
| 26.05\% | 26.05\% |
| $(98,877)$ | 157,196 |
| 9.24\% | 9.24\% |
| $(9,140)$ | 14,531 |



## AWEC/201

Mullins/3

| Resource |  |  |  |  |  |  |  |  |  | Rate Base Delta UE 263 to Repwr Dates |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Forward to Repowering Dates (Oct 1, 2019, Dec 1, 2019) |  |  |  |  |  |  |  |  |  |
|  | Adt'I Months Accum. | Dep. Accr. Rate | Incr. Accum Depr. | Incr. ADIT Reversal | Inc. Cap Maint. | Gross Plant | Accum. Depr. | ADIT | Rate <br> Base |  |
| Glenrock 1 | 9.00 | 3.42 | $(5,580)$ | 1,172 | 724 | 218,274 | $(79,089)$ | $(53,103)$ | 86,082 | 37,421 |
| Seven Mile Hill 2 | 9.00 | 3.35 | $(5,131)$ | 1,077 | 315 | 204,517 | $(73,651)$ | $(49,636)$ | 81,230 | 37,101 |
| Seven Mile Hill 2 | 9.00 | 3.35 | $(1,193)$ | 251 | 172 | 47,658 | $(16,407)$ | $(10,295)$ | 20,956 | 7,222 |
| High Plains | 11.00 | 3.37 | $(6,983)$ | 1,466 | 125 | 226,178 | $(79,543)$ | $(59,896)$ | 86,738 | 49,328 |
| McFadden | 11.00 | 3.37 | $(1,808)$ | 380 | 32 | 58,561 | $(20,660)$ | $(14,690)$ | 23,212 | 12,072 |
| Leaning Juniper | 9.00 | 3.32 | $(4,566)$ | 959 | 651 | 184,042 | $(78,225)$ | $(46,197)$ | 59,620 | 29,341 |
| Marengo 1 | 11.00 | 3.37 | $(7,699)$ | 1,617 | 626 | 249,845 | $(106,459)$ | $(61,011)$ | 82,375 | 46,570 |
| Marengo 2 | 11.00 | 3.37 | $(4,223)$ | 887 | 225 | 136,928 | $(53,781)$ | $(28,678)$ | 54,469 | 24,102 |
| Goodnoe Hills | 11.00 | 3.36 | $(6,020)$ | 1,264 | 578 | 196,020 | $(71,071)$ | $(46,947)$ | 78,002 | 32,605 |
| Total Company |  |  | $(43,203)$ | 9,073 | 3,448 | 1,522,023 | $(578,885)$ | $(370,452)$ | 572,686 | 275,762 |
| Oregon SG (RAC SG) |  |  |  |  |  | 26.72\% | 26.72\% | 26.72\% | 26.72\% |  |
| Oregon Allocated |  |  |  |  |  | 406,758 | $(154,706)$ | $(99,002)$ | 153,049 | $(67,997)$ |
| Pre-tax ROR |  |  |  |  |  | 9.24\% | 9.24\% | 9.24\% | 9.24\% |  |
| Return on Rate Base |  |  |  |  |  | 37,601 | $(14,301)$ | $(9,152)$ | 14,148 | $(6,286)$ |


| Oct 1, 2019 | 2,521 |
| :--- | :--- |
| Dec 1,2019 | 3,764 |

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON 

UE 352
In the Matter of
PACIFICORP, dba PACIFIC POWER, 2019 Renewable Adjustment Clause.
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EXHIBIT AWEC/202 ORS 757.140(2) - REGULATORY ASSET AMORTIZATION

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

| Proposed Amortization Target |  |
| :--- | ---: |
|  |  |
| Remove Unrecovered Plant From Rate Base (Below) | $14,503,944$ |
| Adjust Depreciation Expense For Retirements ( OPUC 22) | $9,941,442$ |
| ORS 757.140(2)(b) Amortization Annual | $24,445,386$ |
| ORS 757.140(2)(b) Amortization Monthly | $2,037,116$ |


| Wind Repowering Property Removed From Service: |  |
| :--- | ---: |
| Net Book Value | $587,094,258$ |
| Oregon SE | $26.72 \%$ |
| Oregon-Allocated | $156,899,766$ |
| Pre-Tax ROR | $9.24 \%$ |
| Return on Rate Base in Rates | $14,503,944$ |


| Amortization Schedule |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| MBT Rate: | 3.49\% |  |  |  |
| Month | $\begin{gathered} \text { Beg. } \\ \text { Bal } \end{gathered}$ | Amortization | Interest | End Balance |
| 1 | 156,899,766 | $(2,037,116)$ | 453,355 | 155,316,005 |
| 2 | 155,316,005 | $(2,037,116)$ | 448,748 | 153,727,638 |
| 3 | 153,727,638 | $(2,037,116)$ | 444,129 | 152,134,652 |
| 4 | 152,134,652 | $(2,037,116)$ | 439,496 | 150,537,032 |
| 5 | 150,537,032 | $(2,037,116)$ | 434,850 | 148,934,766 |
| 6 | 148,934,766 | $(2,037,116)$ | 430,190 | 147,327,840 |
| 7 | 147,327,840 | $(2,037,116)$ | 425,516 | 145,716,241 |
| 8 | 145,716,241 | $(2,037,116)$ | 420,829 | 144,099,954 |
| 9 | 144,099,954 | $(2,037,116)$ | 416,128 | 142,478,967 |
| 10 | 142,478,967 | $(2,037,116)$ | 411,414 | 140,853,266 |
| 11 | 140,853,266 | $(2,037,116)$ | 406,686 | 139,222,836 |
| 12 | 139,222,836 | $(2,037,116)$ | 401,944 | 137,587,665 |
| 13 | 137,587,665 | $(2,037,116)$ | 397,188 | 135,947,738 |
| 14 | 135,947,738 | $(2,037,116)$ | 392,419 | 134,303,041 |
| 15 | 134,303,041 | $(2,037,116)$ | 387,636 | 132,653,561 |
| 16 | 132,653,561 | $(2,037,116)$ | 382,838 | 130,999,284 |
| 17 | 130,999,284 | $(2,037,116)$ | 378,027 | 129,340,196 |
| 18 | 129,340,196 | $(2,037,116)$ | 373,202 | 127,676,283 |
| 19 | 127,676,283 | $(2,037,116)$ | 368,363 | 126,007,530 |
| 20 | 126,007,530 | $(2,037,116)$ | 363,510 | 124,333,924 |
| 21 | 124,333,924 | $(2,037,116)$ | 358,642 | 122,655,451 |
| 22 | 122,655,451 | $(2,037,116)$ | 353,761 | 120,972,096 |
| 23 | 120,972,096 | $(2,037,116)$ | 348,865 | 119,283,845 |
| 24 | 119,283,845 | $(2,037,116)$ | 343,955 | 117,590,685 |
| 25 | 117,590,685 | $(2,037,116)$ | 339,031 | 115,892,600 |
| 26 | 115,892,600 | $(2,037,116)$ | 334,092 | 114,189,576 |
| 27 | 114,189,576 | $(2,037,116)$ | 329,139 | 112,481,600 |
| 28 | 112,481,600 | $(2,037,116)$ | 324,172 | 110,768,656 |
| 29 | 110,768,656 | $(2,037,116)$ | 319,190 | 109,050,730 |
| 30 | 109,050,730 | $(2,037,116)$ | 314,194 | 107,327,808 |
| 31 | 107,327,808 | $(2,037,116)$ | 309,183 | 105,599,875 |


| 32 | 105,599,875 | $(2,037,116)$ | 304,157 | 103,866,917 |
| :---: | :---: | :---: | :---: | :---: |
| 33 | 103,866,917 | $(2,037,116)$ | 299,117 | 102,128,919 |
| 34 | 102,128,919 | $(2,037,116)$ | 294,063 | 100,385,866 |
| 35 | 100,385,866 | $(2,037,116)$ | 288,993 | 98,637,744 |
| 36 | 98,637,744 | $(2,037,116)$ | 283,909 | 96,884,537 |
| 37 | 96,884,537 | $(2,037,116)$ | 278,810 | 95,126,232 |
| 38 | 95,126,232 | $(2,037,116)$ | 273,696 | 93,362,813 |
| 39 | 93,362,813 | $(2,037,116)$ | 268,568 | 91,594,265 |
| 40 | 91,594,265 | $(2,037,116)$ | 263,424 | 89,820,574 |
| 41 | 89,820,574 | $(2,037,116)$ | 258,266 | 88,041,725 |
| 42 | 88,041,725 | $(2,037,116)$ | 253,092 | 86,257,701 |
| 43 | 86,257,701 | $(2,037,116)$ | 247,904 | 84,468,490 |
| 44 | 84,468,490 | $(2,037,116)$ | 242,700 | 82,674,074 |
| 45 | 82,674,074 | $(2,037,116)$ | 237,481 | 80,874,440 |
| 46 | 80,874,440 | $(2,037,116)$ | 232,248 | 79,069,572 |
| 47 | 79,069,572 | $(2,037,116)$ | 226,998 | 77,259,455 |
| 48 | 77,259,455 | $(2,037,116)$ | 221,734 | 75,444,074 |
| 49 | 75,444,074 | $(2,037,116)$ | 216,454 | 73,623,412 |
| 50 | 73,623,412 | $(2,037,116)$ | 211,159 | 71,797,456 |
| 51 | 71,797,456 | $(2,037,116)$ | 205,849 | 69,966,189 |
| 52 | 69,966,189 | $(2,037,116)$ | 200,523 | 68,129,596 |
| 53 | 68,129,596 | $(2,037,116)$ | 195,181 | 66,287,662 |
| 54 | 66,287,662 | $(2,037,116)$ | 189,824 | 64,440,371 |
| 55 | 64,440,371 | $(2,037,116)$ | 184,452 | 62,587,707 |
| 56 | 62,587,707 | $(2,037,116)$ | 179,064 | 60,729,655 |
| 57 | 60,729,655 | $(2,037,116)$ | 173,660 | 58,866,199 |
| 58 | 58,866,199 | $(2,037,116)$ | 168,240 | 56,997,324 |
| 59 | 56,997,324 | $(2,037,116)$ | 162,805 | 55,123,013 |
| 60 | 55,123,013 | $(2,037,116)$ | 157,354 | 53,243,252 |
| 61 | 53,243,252 | $(2,037,116)$ | 151,887 | 51,358,023 |
| 62 | 51,358,023 | $(2,037,116)$ | 146,404 | 49,467,311 |
| 63 | 49,467,311 | $(2,037,116)$ | 140,905 | 47,571,101 |
| 64 | 47,571,101 | $(2,037,116)$ | 135,390 | 45,669,376 |
| 65 | 45,669,376 | $(2,037,116)$ | 129,859 | 43,762,120 |
| 66 | 43,762,120 | $(2,037,116)$ | 124,313 | 41,849,317 |
| 67 | 41,849,317 | $(2,037,116)$ | 118,749 | 39,930,951 |
| 68 | 39,930,951 | $(2,037,116)$ | 113,170 | 38,007,005 |
| 69 | 38,007,005 | $(2,037,116)$ | 107,575 | 36,077,464 |
| 70 | 36,077,464 | $(2,037,116)$ | 101,963 | 34,142,312 |
| 71 | 34,142,312 | $(2,037,116)$ | 96,335 | 32,201,531 |
| 72 | 32,201,531 | $(2,037,116)$ | 90,690 | 30,255,106 |
| 73 | 30,255,106 | $(2,037,116)$ | 85,030 | 28,303,020 |
| 74 | 28,303,020 | $(2,037,116)$ | 79,352 | 26,345,257 |
| 75 | 26,345,257 | $(2,037,116)$ | 73,658 | 24,381,800 |
| 76 | 24,381,800 | $(2,037,116)$ | 67,948 | 22,412,633 |
| 77 | 22,412,633 | $(2,037,116)$ | 62,221 | 20,437,738 |
| 78 | 20,437,738 | $(2,037,116)$ | 56,477 | 18,457,100 |
| 79 | 18,457,100 | $(2,037,116)$ | 50,717 | 16,470,702 |
| 80 | 16,470,702 | $(2,037,116)$ | 44,940 | 14,478,526 |
| 81 | 14,478,526 | $(2,037,116)$ | 39,146 | 12,480,557 |
| 82 | 12,480,557 | $(2,037,116)$ | 33,335 | 10,476,777 |
| 83 | 10,476,777 | $(2,037,116)$ | 27,508 | 8,467,169 |
| 84 | 8,467,169 | $(2,037,116)$ | 21,663 | 6,451,716 |
| 85 | 6,451,716 | $(2,037,116)$ | 15,801 | 4,430,402 |
| 86 | 4,430,402 | $(2,037,116)$ | 9,923 | 2,403,209 |
| 87 | 2,403,209 | $(2,037,116)$ | 4,027 | 370,121 |
| 88 | 370,121 | $(2,037,116)$ | $(1,886)$ | $(1,668,881)$ |
| 89 | - | - | - | - |

# BEFORE THE PUBLIC UTILITY COMMISSION <br> OF OREGON 

UE 352
In the Matter of
PACIFICORP, dba PACIFIC POWER, 2019 Renewable Adjustment Clause.
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EXHIBIT AWEC/203
ORS 757.140(2) - REGULATORY ASSET AMORTIZATION USING ROR

Amortization schedule for ORS 757.140(2)(b) regulatory asset at Pre-tax RoR rate

| Proposed Amortization Target |  |
| :--- | ---: |
|  |  |
| Remove Unrecovered Plant From Rate Base (Below) | $14,503,944$ |
| Adjust Depreciation Expense For Retirements ( OPUC 22) | $9,941,442$ |
| ORS 757.140(2)(b) Amortization Annual | $24,445,386$ |
| ORS 757.140(2)(b) Amortization Monthly | $2,037,116$ |


| Wind Repowering Property Removed From Service: |  |
| :--- | ---: |
| Net Book Value (AWEC DR 09) | $587,094,258$ |
| Oregon SE | $26.72 \%$ |
| Oregon-Allocated | $156,899,766$ |
| Pre-Tax ROR | $9.24 \%$ |
| Return on Rate Base in Rates | $14,503,944$ |


| Amortization Schedule |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RoR Rate: | 9.24\% |  |  |  |
|  | Beg. | Amortization | Interest | End Balance |
| 1 | 156,899,766 | $(2,037,116)$ | 1,200,816 | 156,063,466 |
| 2 | 156,063,466 | $(2,037,116)$ | 1,194,373 | 155,220,724 |
| 3 | 155,220,724 | $(2,037,116)$ | 1,187,881 | 154,371,490 |
| 4 | 154,371,490 | $(2,037,116)$ | 1,181,339 | 153,515,714 |
| 5 | 153,515,714 | $(2,037,116)$ | 1,174,747 | 152,653,345 |
| 6 | 152,653,345 | $(2,037,116)$ | 1,168,104 | 151,784,333 |
| 7 | 151,784,333 | $(2,037,116)$ | 1,161,409 | 150,908,627 |
| 8 | 150,908,627 | $(2,037,116)$ | 1,154,663 | 150,026,175 |
| 9 | 150,026,175 | $(2,037,116)$ | 1,147,866 | 149,136,925 |
| 10 | 149,136,925 | $(2,037,116)$ | 1,141,015 | 148,240,825 |
| 11 | 148,240,825 | $(2,037,116)$ | 1,134,112 | 147,337,822 |
| 12 | 147,337,822 | $(2,037,116)$ | 1,127,156 | 146,427,863 |
| 13 | 146,427,863 | $(2,037,116)$ | 1,120,146 | 145,510,893 |
| 14 | 145,510,893 | $(2,037,116)$ | 1,113,083 | 144,586,860 |
| 15 | 144,586,860 | $(2,037,116)$ | 1,105,964 | 143,655,709 |
| 16 | 143,655,709 | $(2,037,116)$ | 1,098,791 | 142,717,385 |
| 17 | 142,717,385 | $(2,037,116)$ | 1,091,563 | 141,771,833 |
| 18 | 141,771,833 | $(2,037,116)$ | 1,084,279 | 140,818,996 |
| 19 | 140,818,996 | $(2,037,116)$ | 1,076,939 | 139,858,820 |
| 20 | 139,858,820 | $(2,037,116)$ | 1,069,542 | 138,891,247 |
| 21 | 138,891,247 | $(2,037,116)$ | 1,062,089 | 137,916,220 |
| 22 | 137,916,220 | $(2,037,116)$ | 1,054,578 | 136,933,682 |
| 23 | 136,933,682 | $(2,037,116)$ | 1,047,009 | 135,943,575 |
| 24 | 135,943,575 | $(2,037,116)$ | 1,039,382 | 134,945,842 |
| 25 | 134,945,842 | $(2,037,116)$ | 1,031,696 | 133,940,422 |
| 26 | 133,940,422 | $(2,037,116)$ | 1,023,951 | 132,927,257 |
| 27 | 132,927,257 | $(2,037,116)$ | 1,016,146 | 131,906,287 |
| 28 | 131,906,287 | $(2,037,116)$ | 1,008,281 | 130,877,452 |
| 29 | 130,877,452 | $(2,037,116)$ | 1,000,355 | 129,840,692 |
| 30 | 129,840,692 | $(2,037,116)$ | 992,369 | 128,795,945 |
| 31 | 128,795,945 | $(2,037,116)$ | 984,321 | 127,743,150 |
| 32 | 127,743,150 | $(2,037,116)$ | 976,211 | 126,682,245 |


| 33 | 126,682,245 | $(2,037,116)$ | 968,038 | 125,613,168 |
| :---: | :---: | :---: | :---: | :---: |
| 34 | 125,613,168 | $(2,037,116)$ | 959,802 | 124,535,855 |
| 35 | 124,535,855 | $(2,037,116)$ | 951,503 | 123,450,242 |
| 36 | 123,450,242 | $(2,037,116)$ | 943,141 | 122,356,267 |
| 37 | 122,356,267 | $(2,037,116)$ | 934,713 | 121,253,865 |
| 38 | 121,253,865 | $(2,037,116)$ | 926,221 | 120,142,971 |
| 39 | 120,142,971 | $(2,037,116)$ | 917,663 | 119,023,518 |
| 40 | 119,023,518 | $(2,037,116)$ | 909,040 | 117,895,442 |
| 41 | 117,895,442 | $(2,037,116)$ | 900,350 | 116,758,677 |
| 42 | 116,758,677 | $(2,037,116)$ | 891,593 | 115,613,154 |
| 43 | 115,613,154 | $(2,037,116)$ | 882,768 | 114,458,806 |
| 44 | 114,458,806 | $(2,037,116)$ | 873,876 | 113,295,567 |
| 45 | 113,295,567 | $(2,037,116)$ | 864,915 | 112,123,366 |
| 46 | 112,123,366 | $(2,037,116)$ | 855,885 | 110,942,136 |
| 47 | 110,942,136 | $(2,037,116)$ | 846,786 | 109,751,806 |
| 48 | 109,751,806 | $(2,037,116)$ | 837,616 | 108,552,306 |
| 49 | 108,552,306 | $(2,037,116)$ | 828,376 | 107,343,566 |
| 50 | 107,343,566 | $(2,037,116)$ | 819,064 | 106,125,515 |
| 51 | 106,125,515 | $(2,037,116)$ | 809,681 | 104,898,081 |
| 52 | 104,898,081 | $(2,037,116)$ | 800,226 | 103,661,191 |
| 53 | 103,661,191 | $(2,037,116)$ | 790,697 | 102,414,773 |
| 54 | 102,414,773 | $(2,037,116)$ | 781,096 | 101,158,753 |
| 55 | 101,158,753 | $(2,037,116)$ | 771,420 | 99,893,058 |
| 56 | 99,893,058 | $(2,037,116)$ | 761,670 | 98,617,612 |
| 57 | 98,617,612 | $(2,037,116)$ | 751,845 | 97,332,342 |
| 58 | 97,332,342 | $(2,037,116)$ | 741,944 | 96,037,170 |
| 59 | 96,037,170 | $(2,037,116)$ | 731,967 | 94,732,021 |
| 60 | 94,732,021 | $(2,037,116)$ | 721,912 | 93,416,818 |
| 61 | 93,416,818 | $(2,037,116)$ | 711,781 | 92,091,483 |
| 62 | 92,091,483 | $(2,037,116)$ | 701,571 | 90,755,939 |
| 63 | 90,755,939 | $(2,037,116)$ | 691,283 | 89,410,107 |
| 64 | 89,410,107 | $(2,037,116)$ | 680,916 | 88,053,907 |
| 65 | 88,053,907 | $(2,037,116)$ | 670,468 | 86,687,260 |
| 66 | 86,687,260 | $(2,037,116)$ | 659,940 | 85,310,085 |
| 67 | 85,310,085 | $(2,037,116)$ | 649,332 | 83,922,301 |
| 68 | 83,922,301 | $(2,037,116)$ | 638,641 | 82,523,826 |
| 69 | 82,523,826 | $(2,037,116)$ | 627,868 | 81,114,578 |
| 70 | 81,114,578 | $(2,037,116)$ | 617,012 | 79,694,475 |
| 71 | 79,694,475 | $(2,037,116)$ | 606,072 | 78,263,432 |
| 72 | 78,263,432 | $(2,037,116)$ | 595,048 | 76,821,364 |
| 73 | 76,821,364 | $(2,037,116)$ | 583,940 | 75,368,188 |
| 74 | 75,368,188 | $(2,037,116)$ | 572,745 | 73,903,818 |
| 75 | 73,903,818 | $(2,037,116)$ | 561,464 | 72,428,167 |
| 76 | 72,428,167 | $(2,037,116)$ | 550,097 | 70,941,148 |
| 77 | 70,941,148 | $(2,037,116)$ | 538,642 | 69,442,675 |
| 78 | 69,442,675 | $(2,037,116)$ | 527,098 | 67,932,658 |
| 79 | 67,932,658 | $(2,037,116)$ | 515,466 | 66,411,008 |
| 80 | 66,411,008 | $(2,037,116)$ | 503,744 | 64,877,637 |
| 81 | 64,877,637 | $(2,037,116)$ | 491,932 | 63,332,454 |
| 82 | 63,332,454 | $(2,037,116)$ | 480,029 | 61,775,367 |
| 83 | 61,775,367 | $(2,037,116)$ | 468,034 | 60,206,286 |
| 84 | 60,206,286 | $(2,037,116)$ | 455,947 | 58,625,117 |
| 85 | 58,625,117 | $(2,037,116)$ | 443,766 | 57,031,768 |
| 86 | 57,031,768 | $(2,037,116)$ | 431,492 | 55,426,145 |
| 87 | 55,426,145 | $(2,037,116)$ | 419,124 | 53,808,153 |
| 88 | 53,808,153 | $(2,037,116)$ | 406,659 | 52,177,697 |
| 89 | 52,177,697 | $(2,037,116)$ | 394,099 | 50,534,681 |
| 90 | 50,534,681 | $(2,037,116)$ | 381,443 | 48,879,008 |
| 91 | 48,879,008 | $(2,037,116)$ | 368,688 | 47,210,581 |
| 92 | 47,210,581 | $(2,037,116)$ | 355,836 | 45,529,301 |
| 93 | 45,529,301 | $(2,037,116)$ | 342,884 | 43,835,069 |


| 94 | $43,835,069$ | $(2,037,116)$ | 329,833 | $42,127,787$ |
| ---: | ---: | ---: | ---: | ---: |
| 95 | $42,127,787$ | $(2,037,116)$ | 316,681 | $40,407,352$ |
| 96 | $40,407,352$ | $(2,037,116)$ | 303,428 | $38,673,664$ |
| 97 | $38,673,664$ | $(2,037,116)$ | 290,072 | $36,926,621$ |
| 98 | $36,926,621$ | $(2,037,116)$ | 276,614 | $35,166,120$ |
| 99 | $35,166,120$ | $(2,037,116)$ | 263,052 | $33,392,057$ |
| 100 | $33,392,057$ | $(2,037,116)$ | 249,386 | $31,604,327$ |
| 101 | $31,604,327$ | $(2,037,116)$ | 235,614 | $29,802,826$ |
| 102 | $29,802,826$ | $(2,037,116)$ | 221,737 | $27,987,448$ |
| 103 | $27,987,448$ | $(2,037,116)$ | 207,752 | $26,158,084$ |
| 104 | $26,158,084$ | $(2,037,116)$ | 193,660 | $24,314,629$ |
| 105 | $24,314,629$ | $(2,037,116)$ | 179,459 | $22,456,972$ |
| 106 | $22,456,972$ | $(2,037,116)$ | 165,149 | $20,585,005$ |
| 107 | $20,585,005$ | $(2,037,116)$ | 150,728 | $18,698,618$ |
| 108 | $18,698,618$ | $(2,037,116)$ | 136,197 | $16,797,699$ |
| 109 | $16,797,699$ | $(2,037,116)$ | 121,553 | $14,882,137$ |
| 110 | $14,882,137$ | $(2,037,116)$ | 106,797 | $12,951,818$ |
| 111 | $12,951,818$ | $(2,037,116)$ | 91,927 | $11,006,629$ |
| 112 | $11,006,629$ | $(2,037,116)$ | 76,942 | $9,046,456$ |
| 113 | $9,046,456$ | $(2,037,116)$ | 61,842 | $7,071,182$ |
| 114 | $7,071,182$ | $(2,037,116)$ | 46,626 | $5,080,693$ |
| 115 | $5,080,693$ | $(2,037,116)$ | 31,292 | $3,074,869$ |
| 116 | $3,074,869$ | $(2,037,116)$ | 15,841 | $1,053,594$ |
| 117 | $1,053,594$ | $(2,037,116)$ | 270 | $(983,251)$ |
| 118 | - | - | - | - |

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON 

UE 352
In the Matter of
PACIFICORP, dba PACIFIC POWER, 2019 Renewable Adjustment Clause.
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EXHIBIT AWEC/204
ORS 757.140(2) - REGULATORY ASSET AMORTIZATION WITH 20-YR. AMORTIZATION PERIOD

Illustrative 20-year amortization schedule for ORS 757.140(2)(b) regulatory asset at MBT Rate rate

| Proposed Amortization Target |  |
| :--- | ---: |
|  |  |
| Remove Unrecovered Plant From Rate Base (Below) | $(14,139,349)$ |
| Adjust Depreciation Expense For Retirements ( OPUC 22) | $(9,941,442)$ |
| Add PacifiCorp 20-yr amort | $10,620,103$ |
| Net Reduction to RAC Recovery | $(13,460,688)$ |


| 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 | $14,139,349$ |



| 31 | 139,138,242 | $(885,009)$ | 403,373 | 138,656,607 |
| :---: | :---: | :---: | :---: | :---: |
| 32 | 138,656,607 | $(885,009)$ | 401,973 | 138,173,571 |
| 33 | 138,173,571 | $(885,009)$ | 400,568 | 137,689,131 |
| 34 | 137,689,131 | $(885,009)$ | 399,159 | 137,203,281 |
| 35 | 137,203,281 | $(885,009)$ | 397,746 | 136,716,018 |
| 36 | 136,716,018 | $(885,009)$ | 396,329 | 136,227,339 |
| 37 | 136,227,339 | $(885,009)$ | 394,908 | 135,737,238 |
| 38 | 135,737,238 | $(885,009)$ | 393,482 | 135,245,711 |
| 39 | 135,245,711 | $(885,009)$ | 392,053 | 134,752,755 |
| 40 | 134,752,755 | $(885,009)$ | 390,619 | 134,258,366 |
| 41 | 134,258,366 | $(885,009)$ | 389,181 | 133,762,538 |
| 42 | 133,762,538 | $(885,009)$ | 387,739 | 133,265,269 |
| 43 | 133,265,269 | $(885,009)$ | 386,293 | 132,766,553 |
| 44 | 132,766,553 | $(885,009)$ | 384,842 | 132,266,387 |
| 45 | 132,266,387 | $(885,009)$ | 383,388 | 131,764,766 |
| 46 | 131,764,766 | $(885,009)$ | 381,929 | 131,261,686 |
| 47 | 131,261,686 | $(885,009)$ | 380,466 | 130,757,144 |
| 48 | 130,757,144 | $(885,009)$ | 378,998 | 130,251,133 |
| 49 | 130,251,133 | $(885,009)$ | 377,527 | 129,743,652 |
| 50 | 129,743,652 | $(885,009)$ | 376,051 | 129,234,694 |
| 51 | 129,234,694 | $(885,009)$ | 374,571 | 128,724,256 |
| 52 | 128,724,256 | $(885,009)$ | 373,086 | 128,212,333 |
| 53 | 128,212,333 | $(885,009)$ | 371,597 | 127,698,922 |
| 54 | 127,698,922 | $(885,009)$ | 370,104 | 127,184,018 |
| 55 | 127,184,018 | $(885,009)$ | 368,607 | 126,667,616 |
| 56 | 126,667,616 | $(885,009)$ | 367,105 | 126,149,712 |
| 57 | 126,149,712 | $(885,009)$ | 365,598 | 125,630,302 |
| 58 | 125,630,302 | $(885,009)$ | 364,088 | 125,109,381 |
| 59 | 125,109,381 | $(885,009)$ | 362,573 | 124,586,945 |
| 60 | 124,586,945 | $(885,009)$ | 361,053 | 124,062,990 |
| 61 | 124,062,990 | $(885,009)$ | 359,530 | 123,537,511 |
| 62 | 123,537,511 | $(885,009)$ | 358,001 | 123,010,504 |
| 63 | 123,010,504 | $(885,009)$ | 356,469 | 122,481,964 |
| 64 | 122,481,964 | $(885,009)$ | 354,931 | 121,951,886 |
| 65 | 121,951,886 | $(885,009)$ | 353,390 | 121,420,268 |
| 66 | 121,420,268 | $(885,009)$ | 351,844 | 120,887,103 |
| 67 | 120,887,103 | $(885,009)$ | 350,293 | 120,352,387 |
| 68 | 120,352,387 | $(885,009)$ | 348,738 | 119,816,116 |
| 69 | 119,816,116 | $(885,009)$ | 347,178 | 119,278,286 |
| 70 | 119,278,286 | $(885,009)$ | 345,614 | 118,738,892 |
| 71 | 118,738,892 | $(885,009)$ | 344,045 | 118,197,928 |
| 72 | 118,197,928 | $(885,009)$ | 342,472 | 117,655,392 |
| 73 | 117,655,392 | $(885,009)$ | 340,894 | 117,111,277 |
| 74 | 117,111,277 | $(885,009)$ | 339,312 | 116,565,580 |
| 75 | 116,565,580 | $(885,009)$ | 337,725 | 116,018,297 |
| 76 | 116,018,297 | $(885,009)$ | 336,133 | 115,469,421 |
| 77 | 115,469,421 | $(885,009)$ | 334,537 | 114,918,949 |
| 78 | 114,918,949 | $(885,009)$ | 332,936 | 114,366,876 |
| 79 | 114,366,876 | $(885,009)$ | 331,330 | 113,813,197 |
| 80 | 113,813,197 | $(885,009)$ | 329,720 | 113,257,909 |
| 81 | 113,257,909 | $(885,009)$ | 328,105 | 112,701,005 |
| 82 | 112,701,005 | $(885,009)$ | 326,485 | 112,142,481 |
| 83 | 112,142,481 | $(885,009)$ | 324,861 | 111,582,334 |
| 84 | 111,582,334 | $(885,009)$ | 323,232 | 111,020,557 |
| 85 | 111,020,557 | $(885,009)$ | 321,598 | 110,457,146 |
| 86 | 110,457,146 | $(885,009)$ | 319,959 | 109,892,097 |
| 87 | 109,892,097 | $(885,009)$ | 318,316 | 109,325,404 |
| 88 | 109,325,404 | $(885,009)$ | 316,668 | 108,757,063 |
| 89 | 108,757,063 | $(885,009)$ | 315,015 | 108,187,069 |
| 90 | 108,187,069 | $(885,009)$ | 313,357 | 107,615,418 |
| 91 | 107,615,418 | $(885,009)$ | 311,695 | 107,042,104 |


| 92 | 107,042,104 | $(885,009)$ | 310,027 | 106,467,122 |
| :---: | :---: | :---: | :---: | :---: |
| 93 | 106,467,122 | $(885,009)$ | 308,355 | 105,890,469 |
| 94 | 105,890,469 | $(885,009)$ | 306,678 | 105,312,138 |
| 95 | 105,312,138 | $(885,009)$ | 304,996 | 104,732,125 |
| 96 | 104,732,125 | $(885,009)$ | 303,309 | 104,150,426 |
| 97 | 104,150,426 | $(885,009)$ | 301,617 | 103,567,034 |
| 98 | 103,567,034 | $(885,009)$ | 299,921 | 102,981,946 |
| 99 | 102,981,946 | $(885,009)$ | 298,219 | 102,395,156 |
| 100 | 102,395,156 | $(885,009)$ | 296,512 | 101,806,660 |
| 101 | 101,806,660 | $(885,009)$ | 294,801 | 101,216,452 |
| 102 | 101,216,452 | $(885,009)$ | 293,084 | 100,624,528 |
| 103 | 100,624,528 | $(885,009)$ | 291,363 | 100,030,882 |
| 104 | 100,030,882 | $(885,009)$ | 289,636 | 99,435,510 |
| 105 | 99,435,510 | $(885,009)$ | 287,905 | 98,838,406 |
| 106 | 98,838,406 | $(885,009)$ | 286,168 | 98,239,565 |
| 107 | 98,239,565 | $(885,009)$ | 284,426 | 97,638,983 |
| 108 | 97,638,983 | $(885,009)$ | 282,680 | 97,036,654 |
| 109 | 97,036,654 | $(885,009)$ | 280,928 | 96,432,574 |
| 110 | 96,432,574 | $(885,009)$ | 279,171 | 95,826,736 |
| 111 | 95,826,736 | $(885,009)$ | 277,409 | 95,219,137 |
| 112 | 95,219,137 | $(885,009)$ | 275,642 | 94,609,770 |
| 113 | 94,609,770 | $(885,009)$ | 273,870 | 93,998,632 |
| 114 | 93,998,632 | $(885,009)$ | 272,092 | 93,385,715 |
| 115 | 93,385,715 | $(885,009)$ | 270,310 | 92,771,017 |
| 116 | 92,771,017 | $(885,009)$ | 268,522 | 92,154,530 |
| 117 | 92,154,530 | $(885,009)$ | 266,729 | 91,536,251 |
| 118 | 91,536,251 | $(885,009)$ | 264,931 | 90,916,173 |
| 119 | 90,916,173 | $(885,009)$ | 263,128 | 90,294,292 |
| 120 | 90,294,292 | $(885,009)$ | 261,319 | 89,670,602 |
| 121 | 89,670,602 | $(885,009)$ | 259,505 | 89,045,099 |
| 122 | 89,045,099 | $(885,009)$ | 257,686 | 88,417,776 |
| 123 | 88,417,776 | $(885,009)$ | 255,861 | 87,788,629 |
| 124 | 87,788,629 | $(885,009)$ | 254,032 | 87,157,652 |
| 125 | 87,157,652 | $(885,009)$ | 252,197 | 86,524,840 |
| 126 | 86,524,840 | $(885,009)$ | 250,356 | 85,890,188 |
| 127 | 85,890,188 | $(885,009)$ | 248,510 | 85,253,689 |
| 128 | 85,253,689 | $(885,009)$ | 246,659 | 84,615,340 |
| 129 | 84,615,340 | $(885,009)$ | 244,803 | 83,975,134 |
| 130 | 83,975,134 | $(885,009)$ | 242,941 | 83,333,066 |
| 131 | 83,333,066 | $(885,009)$ | 241,073 | 82,689,131 |
| 132 | 82,689,131 | $(885,009)$ | 239,201 | 82,043,323 |
| 133 | 82,043,323 | $(885,009)$ | 237,322 | 81,395,637 |
| 134 | 81,395,637 | $(885,009)$ | 235,439 | 80,746,067 |
| 135 | 80,746,067 | $(885,009)$ | 233,550 | 80,094,608 |
| 136 | 80,094,608 | $(885,009)$ | 231,655 | 79,441,254 |
| 137 | 79,441,254 | $(885,009)$ | 229,755 | 78,786,000 |
| 138 | 78,786,000 | $(885,009)$ | 227,849 | 78,128,841 |
| 139 | 78,128,841 | $(885,009)$ | 225,938 | 77,469,770 |
| 140 | 77,469,770 | $(885,009)$ | 224,021 | 76,808,782 |
| 141 | 76,808,782 | $(885,009)$ | 222,099 | 76,145,872 |
| 142 | 76,145,872 | $(885,009)$ | 220,171 | 75,481,034 |
| 143 | 75,481,034 | $(885,009)$ | 218,237 | 74,814,263 |
| 144 | 74,814,263 | $(885,009)$ | 216,298 | 74,145,552 |
| 145 | 74,145,552 | $(885,009)$ | 214,353 | 73,474,896 |
| 146 | 73,474,896 | $(885,009)$ | 212,403 | 72,802,290 |
| 147 | 72,802,290 | $(885,009)$ | 210,446 | 72,127,728 |
| 148 | 72,127,728 | $(885,009)$ | 208,485 | 71,451,204 |
| 149 | 71,451,204 | $(885,009)$ | 206,517 | 70,772,713 |
| 150 | 70,772,713 | $(885,009)$ | 204,544 | 70,092,248 |
| 151 | 70,092,248 | $(885,009)$ | 202,565 | 69,409,804 |
| 152 | 69,409,804 | $(885,009)$ | 200,580 | 68,725,375 |


| 153 | 68,725,375 | $(885,009)$ | 198,589 | 68,038,956 |
| :---: | :---: | :---: | :---: | :---: |
| 154 | 68,038,956 | $(885,009)$ | 196,593 | 67,350,540 |
| 155 | 67,350,540 | $(885,009)$ | 194,591 | 66,660,122 |
| 156 | 66,660,122 | $(885,009)$ | 192,583 | 65,967,697 |
| 157 | 65,967,697 | $(885,009)$ | 190,569 | 65,273,257 |
| 158 | 65,273,257 | $(885,009)$ | 188,549 | 64,576,798 |
| 159 | 64,576,798 | $(885,009)$ | 186,524 | 63,878,314 |
| 160 | 63,878,314 | $(885,009)$ | 184,492 | 63,177,797 |
| 161 | 63,177,797 | $(885,009)$ | 182,455 | 62,475,244 |
| 162 | 62,475,244 | $(885,009)$ | 180,412 | 61,770,647 |
| 163 | 61,770,647 | $(885,009)$ | 178,363 | 61,064,001 |
| 164 | 61,064,001 | $(885,009)$ | 176,308 | 60,355,300 |
| 165 | 60,355,300 | $(885,009)$ | 174,246 | 59,644,538 |
| 166 | 59,644,538 | $(885,009)$ | 172,179 | 58,931,709 |
| 167 | 58,931,709 | $(885,009)$ | 170,106 | 58,216,806 |
| 168 | 58,216,806 | $(885,009)$ | 168,027 | 57,499,825 |
| 169 | 57,499,825 | $(885,009)$ | 165,942 | 56,780,758 |
| 170 | 56,780,758 | $(885,009)$ | 163,850 | 56,059,600 |
| 171 | 56,059,600 | $(885,009)$ | 161,753 | 55,336,344 |
| 172 | 55,336,344 | $(885,009)$ | 159,650 | 54,610,985 |
| 173 | 54,610,985 | $(885,009)$ | 157,540 | 53,883,516 |
| 174 | 53,883,516 | $(885,009)$ | 155,424 | 53,153,932 |
| 175 | 53,153,932 | $(885,009)$ | 153,302 | 52,422,226 |
| 176 | 52,422,226 | $(885,009)$ | 151,174 | 51,688,392 |
| 177 | 51,688,392 | $(885,009)$ | 149,040 | 50,952,423 |
| 178 | 50,952,423 | $(885,009)$ | 146,900 | 50,214,314 |
| 179 | 50,214,314 | $(885,009)$ | 144,753 | 49,474,059 |
| 180 | 49,474,059 | $(885,009)$ | 142,600 | 48,731,650 |
| 181 | 48,731,650 | $(885,009)$ | 140,441 | 47,987,083 |
| 182 | 47,987,083 | $(885,009)$ | 138,275 | 47,240,350 |
| 183 | 47,240,350 | $(885,009)$ | 136,104 | 46,491,445 |
| 184 | 46,491,445 | $(885,009)$ | 133,926 | 45,740,362 |
| 185 | 45,740,362 | $(885,009)$ | 131,741 | 44,987,094 |
| 186 | 44,987,094 | $(885,009)$ | 129,551 | 44,231,636 |
| 187 | 44,231,636 | $(885,009)$ | 127,353 | 43,473,981 |
| 188 | 43,473,981 | $(885,009)$ | 125,150 | 42,714,122 |
| 189 | 42,714,122 | $(885,009)$ | 122,940 | 41,952,054 |
| 190 | 41,952,054 | $(885,009)$ | 120,724 | 41,187,769 |
| 191 | 41,187,769 | $(885,009)$ | 118,501 | 40,421,261 |
| 192 | 40,421,261 | $(885,009)$ | 116,272 | 39,652,524 |
| 193 | 39,652,524 | $(885,009)$ | 114,036 | 38,881,551 |
| 194 | 38,881,551 | $(885,009)$ | 111,794 | 38,108,336 |
| 195 | 38,108,336 | $(885,009)$ | 109,545 | 37,332,872 |
| 196 | 37,332,872 | $(885,009)$ | 107,289 | 36,555,153 |
| 197 | 36,555,153 | $(885,009)$ | 105,028 | 35,775,172 |
| 198 | 35,775,172 | $(885,009)$ | 102,759 | 34,992,923 |
| 199 | 34,992,923 | $(885,009)$ | 100,484 | 34,208,399 |
| 200 | 34,208,399 | $(885,009)$ | 98,202 | 33,421,592 |
| 201 | 33,421,592 | $(885,009)$ | 95,914 | 32,632,498 |
| 202 | 32,632,498 | $(885,009)$ | 93,619 | 31,841,109 |
| 203 | 31,841,109 | $(885,009)$ | 91,318 | 31,047,418 |
| 204 | 31,047,418 | $(885,009)$ | 89,009 | 30,251,418 |
| 205 | 30,251,418 | $(885,009)$ | 86,694 | 29,453,104 |
| 206 | 29,453,104 | $(885,009)$ | 84,372 | 28,652,468 |
| 207 | 28,652,468 | $(885,009)$ | 82,044 | 27,849,503 |
| 208 | 27,849,503 | $(885,009)$ | 79,709 | 27,044,204 |
| 209 | 27,044,204 | $(885,009)$ | 77,367 | 26,236,562 |
| 210 | 26,236,562 | $(885,009)$ | 75,018 | 25,426,571 |
| 211 | 25,426,571 | $(885,009)$ | 72,662 | 24,614,224 |
| 212 | 24,614,224 | $(885,009)$ | 70,299 | 23,799,515 |
| 213 | 23,799,515 | $(885,009)$ | 67,930 | 22,982,436 |


| 214 | $22,982,436$ | $(885,009)$ | 65,554 | $22,162,981$ |
| ---: | ---: | ---: | ---: | ---: |
| 215 | $22,162,981$ | $(885,009)$ | 63,170 | $21,341,143$ |
| 216 | $21,341,143$ | $(885,009)$ | 60,780 | $20,516,915$ |
| 217 | $20,516,915$ | $(885,009)$ | 58,383 | $19,690,289$ |
| 218 | $19,690,289$ | $(885,009)$ | 55,979 | $18,861,260$ |
| 219 | $18,861,260$ | $(885,009)$ | 53,568 | $18,029,819$ |
| 220 | $18,029,819$ | $(885,009)$ | 51,150 | $17,195,960$ |
| 221 | $17,195,960$ | $(885,009)$ | 48,725 | $16,359,676$ |
| 222 | $16,359,676$ | $(885,009)$ | 46,292 | $15,520,960$ |
| 223 | $15,520,960$ | $(885,009)$ | 43,853 | $14,679,805$ |
| 224 | $14,679,805$ | $(885,009)$ | 41,407 | $13,836,203$ |
| 225 | $13,836,203$ | $(885,009)$ | 38,953 | $12,990,148$ |
| 226 | $12,990,148$ | $(885,009)$ | 36,493 | $12,141,632$ |
| 227 | $12,141,632$ | $(885,009)$ | 34,025 | $11,290,648$ |
| 228 | $11,290,648$ | $(885,009)$ | 31,550 | $10,437,190$ |
| 229 | $10,437,190$ | $(885,009)$ | 29,068 | $9,581,249$ |
| 230 | $9,581,249$ | $(885,009)$ | 26,579 | $8,722,819$ |
| 231 | $8,722,819$ | $(885,009)$ | 24,082 | $7,861,892$ |
| 232 | $7,861,892$ | $(885,009)$ | 21,578 | $6,998,462$ |
| 233 | $6,998,462$ | $(885,009)$ | 19,067 | $6,132,520$ |
| 234 | $6,132,520$ | $(885,009)$ | 16,548 | $5,264,060$ |
| 235 | $5,264,060$ | $(885,009)$ | 14,023 | $4,393,074$ |
| 236 | $4,393,074$ | $(885,009)$ | 11,490 | $3,519,555$ |
| 237 | $3,519,555$ | $(885,009)$ | 8,949 | $2,643,495$ |
| 238 | $2,643,495$ | $(885,009)$ | 6,401 | $1,764,888$ |
| 239 | $1,764,888$ | $(885,009)$ | 3,846 | 883,725 |
| 240 | 883,725 | $(885,009)$ | 1,283 | $(0)$ |

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON 

UE 352

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

EXHIBIT AWEC/205
PACIFICORP RESPONSES TO DATA REQUESTS
(REDACTED VERSION)

## AWEC Data Request 0012

Reference McDougal/9:19-10:9: Please provide the end of period net rate base detail associated with Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Glenrock III, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II for the year ending December 31, 2018. Please separately detail the gross-plant, accumulated depreciation, accumulated deferred income taxes, and excess deferred income taxes for each resource.

## Response to AWEC Data Request 0012

Please refer to Attachment AWEC 0012 for requested end of period balances by location of facilities requested for the year ended December 31, 2018. Balances presented in this attachment represent unadjusted balances derived from the company's accounting database and do not reflect any normalizing or pro forma adjustments.

[^4]
## Gross Plant Balances - as of December 31, 2018

LOCATION Sum of Total Co (\$'000)
GLENROCK WIND PLANT COMMON ..... 23,883
GLENROCK WIND PLANT UNIT 1 ..... 200,070
GLENROCK WIND PLANT UNIT 3 ..... 87,255
GOODNOE HILLS WIND PLANT COMMON ..... 5,573
GOODNOE HILLS WIND PLANT UNIT 1 ..... 189,869
HIGH PLAINS - MCFADDEN WIND PLANT COMMON ..... 9,246
HIGH PLAINS WIND PLANT ..... 217,568
LEANING JUNIPER 1 WIND PLANT ..... 183,391
MARENGO UNIT 1 SUBSTATION ..... 7,893
MARENGO UNIT 2 SUBSTATION ..... 7,084
MARENGO WIND PLANT COMMON ..... 10,001
MARENGO WIND PLANT UNIT 1 ..... 234,768
MARENGO WIND PLANT UNIT 2 ..... 126,174
MCFADDEN RIDGE WIND PLANT ..... 56,353
MCFADDEN SUBSTATION ..... 1,416
SEVEN MILE HILL WIND PLANT COMMON ..... 10,561
SEVEN MILE HILL WIND PLANT U1 ..... 198,761
SEVEN MILE HILL WIND PLANT U2 ..... 42,045
SEVENMILE SUBSTATION ..... 321
Grand Total ..... 1,612,233
Accumulated Depreciaion - as of December 31, 2018
LOCATION Sum of Total Co (\$'000)
GLENROCK WIND PLANT UNIT 1
GLENROCK WIND PLANT UNIT 3 ..... $(29,084)$
GOODNOE HILLS WIND PLANT COMMON ..... $(2,010)$
GOODNOE HILLS WIND PLANT UNIT 1 ..... $(63,042)$
HIGH PLAINS - MCFADDEN WIND PLANT COMMON ..... $(1,802)$
HIGH PLAINS WIND PLANT ..... $(70,696)$
LEANING JUNIPER 1 WIND PLANT ..... $(73,659)$
MARENGO UNIT 1 SUBSTATION ..... $(1,473)$
MARENGO UNIT 2 SUBSTATION ..... $(1,234)$
MARENGO WIND PLANT COMMON ..... $(3,197)$
MARENGO WIND PLANT UNIT 1 ..... $(95,191)$
MARENGO WIND PLANT UNIT 2 ..... $(47,222)$
MCFADDEN RIDGE WIND PLANT ..... $(18,373)$
MCFADDEN SUBSTATION ..... (540)
SEVEN MILE HILL WIND PLANT COMMON ..... $(2,262)$
SEVEN MILE HILL WIND PLANT U1 ..... $(67,377)$
SEVEN MILE HILL WIND PLANT U2 ..... $(14,071)$
SEVENMILE SUBSTATION ..... (25)
Grand Total ..... $(564,766)$$(73,509) \quad 126,561$
126,827

## ADIT \& Excess Def Inc Tax - as of December 31, 2018

LOCATION Sum of Total Co
GLENROCK WIND PLANT UNIT 1$(54,275,181)$
GLENROCK WIND PLANT UNIT 3 ..... $(22,345,719)$
GOODNOE HILLS WIND PLANT UNIT 1 ..... $(48,210,818)$
HIGH PLAINS WIND PLANT ..... $(61,362,550)$
LEANING JUNIPER 1 WIND PLANT ..... $(47,155,691)$
MARENGO WIND PLANT UNIT 1 ..... $(62,627,334)$
MARENGO WIND PLANT UNIT 2 ..... $(29,564,505)$
MCFADDEN RIDGE WIND PLANT ..... $(15,069,295)$
SEVEN MILE HILL WIND PLANT U1 ..... $(50,713,551)$
SEVEN MILE HILL WIND PLANT U2 ..... $(10,545,419)$
Grand Total ..... $(401,870,063)$Balances include regulatory Accumlated Deferred Income Tax (ADIT) and Excess Deferred Income Taxes (ED

## AWEC Data Request 0017

Reference AWEC Data Request 07: Please identify the gross plant and accumulated depreciation for Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Glenrock III, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II in Docket No. UE 263. PacifiCorp's original response to the referenced data request detailed only the net plant values included in rate base.

## Response to AWEC Data Request 0017

Referencing the company's response to AWEC Data Request 007, tab "Pivot," FERC Accounts in the " 300 "s range represent gross plant balances, whereas FERC Accounts beginning with "108" represent accumulated depreciation balances. In preparing this response, the company noticed that Glenrock III and Glenrock Common data was inadvertently excluded in the company's original response to AWEC Data Request 007. Please refer to Attachment AWEC 0017 which supplements the Glenrock III and common facilities information, and reorganizes the data into a format more aligned with the company's response to AWEC Data Request 0012, with gross plant and accumulated depreciation data clearly separated into different tabs for ease of reference.

[^5]
## LOCATION

Sum of Total Co. (\$'000)
GLENROCK WIND PLANT COMMON ..... 17,914
GLENROCK WIND PLANT UNIT 1 ..... 199,612
GLENROCK WIND PLANT UNIT 3 ..... 86,981
GOODNOE HILLS WIND PLANT COMMON ..... 5,534
GOODNOE HILLS WIND PLANT UNIT 1 ..... 186,756
HIGH PLAINS - MCFADDEN WIND PLANT COMMON ..... 9,017
HIGH PLAINS WIND PLANT ..... 217,130
LEANING JUNIPER 1 WIND PLANT ..... 179,052
MARENGO UNIT 1 SUBSTATION ..... 7,751
MARENGO UNIT 2 SUBSTATION ..... 6,971
MARENGO WIND PLANT COMMON ..... 7,712
MARENGO WIND PLANT UNIT 1 ..... 232,997
MARENGO WIND PLANT UNIT 2 ..... 125,848
MCFADDEN RIDGE WIND PLANT ..... 56,240
MCFADDEN SUBSTATION ..... 1,341
SEVEN MILE HILL WIND PLANT COMMON ..... 9,900
SEVEN MILE HILL WIND PLANT U1 ..... 197,142
SEVEN MILE HILL WIND PLANT U2 ..... 41,382
SEVENMILE SUBSTATION ..... 16
Grand Total ..... 1,589,295

## LOCATION

Sum of Total Co. (\$'000)
GLENROCK WIND PLANT COMMON ..... $(1,289)$
GLENROCK WIND PLANT UNIT 1 ..... $(31,047)$
GLENROCK WIND PLANT UNIT 3 ..... $(10,552)$
GOODNOE HILLS WIND PLANT COMMON ..... (897)
GOODNOE HILLS WIND PLANT UNIT 1 ..... $(28,555)$
HIGH PLAINS - MCFADDEN WIND PLANT COMMON ..... (598)
HIGH PLAINS WIND PLANT ..... $(24,248)$
LEANING JUNIPER 1 WIND PLANT ..... $(39,593)$
MARENGO UNIT 1 SUBSTATION ..... (622)
MARENGO UNIT 2 SUBSTATION ..... (465)
MARENGO WIND PLANT COMMON ..... $(1,334)$
MARENGO WIND PLANT UNIT 1 ..... $(46,092)$
MARENGO WIND PLANT UNIT 2 ..... $(20,379)$
MCFADDEN RIDGE WIND PLANT ..... $(6,286)$
MCFADDEN SUBSTATION ..... (414)
SEVEN MILE HILL WIND PLANT COMMON ..... (836)
SEVEN MILE HILL WIND PLANT U1 ..... $(26,934)$
SEVEN MILE HILL WIND PLANT U2 ..... $(5,670)$
SEVENMILE SUBSTATION ..... (5)
Grand Total ..... $(245,816)$

## AWEC Data Request 0018

Reference AWEC Data Request 07: Please provide PacifiCorp's best estimate of the accumulated deferred income taxes for Leaning Juniper, Seven Mile Hill I, Seven Mile Hill II, Glenrock I, Glenrock III, Goodnoe Hills, High Plains, McFadden Ridge, Marengo I and Marengo II from docket UE 263.

## Response to AWEC Data Request 0018

Please refer to Confidential Attachment AWEC 0018.
Confidential information is designated as Protected Information under Order No. 18-490 and may only be disclosed to qualified persons as defined in that order.

[^6]2019 Renewable Adjustment Clause
Accumulated Deferred Income Tax Balances for Wind Farms
Per UE-263


## OPUC Data Request 22

Accounting and Depreciation - Regarding the Company's statement, on page 14 of its Energy Vision 2020 Update informational filing dated July 28, 2017 in Docket No. LC 67, that it assumed in the 2017 IRP and in the economic analysis updated with this filing, "...PacifiCorp will fully recover the unrecovered investment in the original equipment on existing wind resources and earn its authorized rate of return on the unrecovered balance over the remainder of the original 30-year depreciable life of each repowered wind facility:"
(a) Please identify the location(s) this assumption was stated in the Company's 2017 IRP filed in Docket No. LC 67.
(b) Please identify the location(s) and date(s) of each other filing in Docket No. LC 67 in which the Company stated this assumption.
(c) Please identify the location(s) the Company stated this assumption in the Company's December 28, 2018 filing in Docket No. UE 352.
(d) Through what date(s), for each repowered wind farm listed in Exhibit PAC/204 Hemstreet/2, does the Company plan for the removed wind turbine generator components to be in Oregon rate base?
(e) Please specify the dollar amount, if any, included in the values in columns identified as $5-9$ (inclusive) appearing on Exhibit PAC/202 Spanos/72 - Spanos/73 in Docket No. 1968 and related to the wind farms listed in Exhibit PAC/204 Hemstreet/2, for the wind turbine generator equipment removed in the course of repowering the Company's wind farms.
(f) Please specify, separately for each wind farm repowering project the Company is proposing to be in Oregon rates as a result of its December 28, 2018 filing in Docket No. UE 352, the dollar amounts by FERC account for each of original cost, book depreciation reserve, future accruals, and annual accrual amount as of year-end 2017 for the wind turbine generator equipment removed in the course of repowering the Company's wind farms.

## Response to OPUC Data Request 22

(a) The economic benefits of wind repowering are calculated by comparing a scenario with and without repowering. In both of these scenarios, PacifiCorp did not included embedded rate base assuming that these costs would be recovered in both scenarios. Referencing PacifiCorp's 2017 Integrated Resource Plan (IRP), filed in docket LC 67, please refer to the confidential data disks supporting PacifiCorp’s 2017 IRP,

[^7]specifically folder "Assumptions + Inputs Conf.zip\Assumptions + Inputs\Wind Repower, CONF"; file "Wind RePower Data Fixed Cost \& PTC." This work paper shows the annual incremental capital recovery costs associated with the wind repowering project. As the unrecovered capital recovery investment amount for the projects is assumed in both the with and without repowering cases, the with repowering captures only the incremental capital recovery amount.
(b) Please refer to the response to subpart (a) above. Note: all documentation filed by parties participating in docket LC 67 are available on the Public Utility Commission of Oregon (OPUC) website, which can be accessed by using the following website link:
https://apps.puc.state.or.us/edockets/docket.asp?DocketID=20532
(c) This assumption is stated in the direct testimony of company witness, Rick T. Link. Please refer to Exhibit PAC/300, Link/16, line 23 through Link/17 line 2.
(d) The company anticipates that the removed wind turbine generator (WTG) components will follow the company's long-standing depreciation methodology practice for equipment that is removed and replaced and will continue to depreciate over the average remaining life of the components to which the replaced equipment belongs.
(e) Please refer to Confidential Attachment OPUC 22 for the December 31, 2017 balances of original cost and accumulated depreciation of the plant attributable to the removed equipment that is included in column 5 and column 6 respectively, on Exhibit PAC/202 Spanos/72 - Spanos/73 in docket UM 1968. The current annual depreciation is also shown using the depreciation rates approved in the 2013 depreciation study, docket UM 1647.
(f) Please refer to Confidential Attachment OPUC 22 for the December 31, 2017 balances of original cost and accumulated depreciation of the plant attributable to the removed equipment. The current annual depreciation is also shown using the depreciation rates approved in the 2013 depreciation study, docket UM 1647.

Confidential information is designated as Protected Information under Order No. 18-490 and may only be disclosed to qualified persons as defined in that order.

[^8]Property and Equipment to be Replaced in Wind Repowering


[^0]:    $2 /$
    PAC/900, McDougal/8:15-20.
    Id. at 9:1-8.
    Id. at 9:20-10:9.
    $\overline{\text { Id. }}$ at $8: 7-14$.

[^1]:    PAC/900, McDougal/12:8-10.

[^2]:    12 PAC/900, McDougal/12:12.
    13/ Id. at 13:13-17.

[^3]:    14) PAC/600, Lockey/21:19-22:2.
[^4]:    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.

[^5]:    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.

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