BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

LC 67

In the Matter of PACIFICORP, dba PACIFIC POWER 2017 Integrated Resource Plan	**Renewable Northwest** **Comments on Staff Report**

I. Introduction

Renewable Northwest thanks the Oregon Public Utility Commission ("Commission") for this opportunity to comment on the Commission Staff ("Staff") Report regarding PacifiCorp's (or "the Company") 2017 Integrated Resource Plan ("IRP"). PacifiCorp's 2017 IRP includes plans to repower at least 999 MW of existing wind resources by 2020 (Action Item 1a).[1] The Company also plans to add over 1,100 MW of new wind resources by the end of 2020 (Action Item 1b).[2] Some of those wind resources would be enabled by a new 140-mile, 500 kV transmission line from the Aeolus substation near Medicine Bow, Wyoming, to the Jim Bridger power plant (Action Item 2a).[3] The Company needs the new transmission to improve reliability, enable new interconnections, and relieve congestion.[4]

As the Commission clarified when adopting the IRP guidelines, "[a]cknowledgment [...] mean[s] simply that the plan seemed reasonable at the time acknowledgment was given."[5] PacifiCorp has shown that its plans for repowering, new wind, and transmission are reasonable. Therefore, we encourage the Commission to acknowledge them.

Renewable Northwest disagrees with the recommendation by Staff that the Commission not acknowledge Action Items 1a, 1b, and 2a.[6] In Section II, we address Staff's argument that the Company does not need renewables by highlighting the link between PacifiCorp's plans to procure new renewables and its capacity needs. In Section III, we address Staff's arguments

[1] PacifiCorp Reply Comments at 2.
[2] PacifiCorp 2017 IRP at 2.
[3] *Id*.
[4] PacifiCorp's presentation at September 14, 2017 Commission Workshop, slide 3.
[5] UM 1056, Investigation Into Integrated Resource Planning, Order No. 07-002 at 2 (Jan. 8, 2007).
[6] Staff Report at 1–2.

against acknowledgement of the Company's plans to repower wind resources by discussing some of the nuances of repowered projects qualifying for the federal production tax credit ("PTC").

II. The New Renewables in PacifiCorp's Action Plan Are Part of the Best Performing Portfolio and would Contribute towards the Company's Capacity Need

The primary goal of the IRP is "the selection of a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and its customers."[7] PacifiCorp's IRP indicates that new renewables are part of a least cost, least risk portfolio to meet the Company's needs, including its capacity needs.[8] Although the Company does not have enough capacity from its existing resources to meet its capacity needs, Staff does not believe that the Company has demonstrated a need for the new wind in the action plan.[9] Staff's view appears to arise in part from an incorrect interpretation of the role of front office transactions ("FOTs") in PacifiCorp's 2017 IRP.

A. PacifiCorp's 2017 IRP Has Always Shown a Capacity Need

In its Report, Staff examines what it considers a "shifting and conflicting" assessment of PacifiCorp's capacity needs as presented by the Company.[10] According to Staff, PacifiCorp has expressed five different versions of its capacity need throughout this IRP process:[11]

- "PacifiCorp Capacity Need Version 1: Approximately 395 MW in the summer of 2028"
- "PacifiCorp Capacity Need Version 2: 174 MW by 2021"
- "PacifiCorp Capacity Need Version 3: Approximately 200 MW by 2021"
- "PacifiCorp Capacity Need Version 4: Greater than 200 MW by 2021"
- "PacifiCorp Capacity Need Version 5: 1000 MW in 2019".

However, as Table 1 (below) shows, a closer examination of these five "versions" of PacifiCorp's capacity need indicates that Staff might be 1) confusing RFP capacity targets with capacity need and 2) potentially misunderstanding the role of FOTs in the Company's IRP.

[7] Order 07-002 at 5.
[8] PacifiCorp 2017 IRP at 91, Table 5.14—Summer Peak, 2019 System Position (927) MW w/o FOTs.
[9] Staff Report at 15.
[10] *Id*.
[11] *Id*.

As of	Asserted Capacity Need	Date of Asserted Capacity Need	What is actually being described
April, 2017	Approximately 395 MW	Summer, 2028	LRB in 2028 presumably[12] inclusive of FOTs.[13]
September 14, 2017	174 MW	By 2021	The capacity contribution of 1,100 MW of WY wind.[14]
September 27, 2017	Approximately 200 MW	By 2021	The capacity contribution of 1,270 MW of WY wind.[15]
September 29, 2017	Greater than 200 MW	By 2021	The capacity contribution of 1,270 MW of WY wind plus potential additional solar resources.
October 30, 2017	1000 MW	2019	Approximate summer system position without new resources or FOTs.[16] (April 4, 2017)

Table 1: Recreation of Staff's table showing what it perceives as inconsistency in size and timing of PacifiCorp's capacity need (shaded)[17] with an additional column explaining why there is no inconsistency.

[12] PacifiCorp 2017 IRP at 90, Chapter 5—Load and Resource Balance, "Capacity Position = (Existing Resources + Available FOTs) – (Obligation + Reserves)."
[13] Staff Report at 16.
[14] PacifiCorp Presentation to OPUC, September 14, 2017, slide 3. http://edocs.puc.state.or.us/efdocs/HAH/lc67hah93622.pdf
[15] Staff Report at 16.
[16] PacifiCorp 2017 IRP at 91, Table 5.14—Summer Peak, 2019 System Position (927) MW w/o FOTs.
[17] Staff Comments at 19.

PacifiCorp Capacity Need "Version 1"

What Staff labels as PacifiCorp's capacity need "Version 1" (approximately 395 MW in the summer of 2028) appears to make reference to confidential Load & Resource Balance ("LRB") data that presumably takes into account available FOTs.[18] Hence, what Staff characterize as need "Version 1" is merely PacifiCorp's LRB deficit in 2028 assuming the utility uses available FOTs.

PacifiCorp Capacity Need "Version 2", "Version 3", and "Version 4"

With "Version 2", "Version 3", and "Version 4", Staff appears to assume that the capacity contribution of the renewables that would be procured through an RFP are an expression of the Company's capacity need (See Table 1).[19] For example, "Version 2" (174 MW by 2021) is the capacity contribution of 1,100 MW of WY wind.[20] Similarly, "Version 3" (approximately 200 MW by 2021) is not a "capacity need" but the capacity contribution of the 1,270 MW of WY wind that PacifiCorp is targeting through its 2017R RFP.[21] Finally, "Version 4" (greater than 200 MW by 2021) merely reflects potential additional solar capacity that the Company could procure through PacifiCorp's 2017S RFP.[22]

PacifiCorp Capacity Need "Version 5"

According to Staff, on October 30, 2017, PacifiCorp "sought to bolster its claim of a capacity need" to "1000 MW, in 2019."[23] However, neither was October 30, 2017, the first time that PacifiCorp presented this figure nor, as we show above, had PacifiCorp at that point presented four other characterizations of capacity need. Indeed, Table 5.14 of PacifiCorp's 2017 IRP, released on April 4, 2017, shows that PacifiCorp has a capacity deficit of 927 MW in 2019, without taking into account available FOTs.[24] PacifiCorp also highlighted this figure at its

[18] PacifiCorp 2017 IRP at 90, Chapter 5—Load and Resource Balance, "Capacity Position = (Existing Resources + Available FOTs) – (Obligation + Reserves)."
[19] *E.g.* PacifiCorp Presentation to OPUC, September 14, 2017, slide 3. http://edocs.puc.state.or.us/efdocs/HAH/lc67hah93622.pdf ("1,100 MW of new Wyoming wind (~174 MW of capacity contribution) by year-end 2020); Staff Final Coments at 16.
[20] PacifiCorp Presentation to OPUC, September 14, 2017, slide 3. http://edocs.puc.state.or.us/efdocs/HAH/lc67hah93622.pdf
[21] Staff Report at 16.
[22] Staff Report at 18, quoting PacifiCorp: "[...] the Company remains open to testing the market for additional solar resource opportunities as indicated in our comments in reply to the Utah IE report. These opportunities we would pursue if they can deliver net benefits for customers, and that can be done in a separate process."
[23] Staff Report at 19.
[24] PacifiCorp 2017 IRP at 91.

September 14, 2017, presentation to the Commission,[25] yet Staff interpreted the same slide as conveying that PacifiCorp had a 174 MW "capacity need".[26]

B. PacifiCorp's 2017 IRP Meets the Company's Capacity Need with New Renewables and FOTs.

Staff states that the Company's plans to procure renewables are driven by economics instead of need,[27] a belief that appears to be based on a misunderstanding of the role of FOTs in PacifiCorp's IRP. Staff acknowledges that new renewables would displace a portion of the FOTs that PacifiCorp would otherwise use to meet its capacity needs.[28] However, according to Staff, "the fact that the resources will be 'used' does not mean that they are needed."[29]

PacifiCorp's 2017 IRP describes FOTs as "proxy resources, assumed to be firm, that represent procurement activity on an on-going forward basis to help the Company cover short positions."[30] The Company added, "FOTs are not committed resources—they are proxy resources that represent future procurement activity to help PacifiCorp cover short positions. While solicitation for FOTs can be made years, quarters or months before, most transactions are made months ahead or less."[31]

In past IRP cycles, PacifiCorp has needed more capacity than what its existing resources can provide and has determined through the IRP process that filling the deficit with FOTs is part of the lowest cost, lowest risk plan.[32] This past reliance on FOTs does not, and should not, obligate the Company to continue relying solely on FOTs if the IRP indicates that meeting some or all of the company's capacity need with other resources is a lower cost, lowest risk approach and is in the long-run public interest. In summary, it would be unreasonable to expect the Company to rely solely on available FOTs to meet its capacity deficit even though the IRP indicates that a different portfolio has lower cost and risk.

Staff's belief that "it would be optimal to explicitly define 'resource need' as post-FOT residual resource need" highlights our concern with how Staff may be interpreting the role of FOTs in the IRP.[33] This proposal seems to suggest that Staff considers reliance on available FOTs—possibly

[25] PacifiCorp Presentation to OPUC, September 14, 2017, slide 3. http://edocs.puc.state.or.us/efdocs/HAH/lc67hah93622.pdf ("1,100 MW of new Wyoming wind (~174 MW of capacity contribution) by year-end 2020); Staff Final Coments at 16.
[26] *Id*.
[27] E.g. Staff Report at 22.
[28] Staff Report at 16.
[29] *Id*.
[30] PacifiCorp 2017 IRP at 141.
[31] PacifiCorp Response Comments at 8.
[32] PacifiCorp 2015 IRP at 190, Figure 8.20 (Summary of PacifiCorp's 2015 Preferred Portfolio); and PacifiCorp 2013 IRP at 229, Figure 8.28 (2013 Resource Capacity Mix with Preferred Portfolio Resources).
[33] Staff Report at 24.

at the levels that PacifiCorp has shown in prior IRPs—a fixture of PacifiCorp's IRPs. However, FOTs are a resource option, and the optimal level of reliance on available FOTs—as part of a lowest cost, lowest risk portfolio—should be determined in the IRP.

Finally, Staff states that "PacifiCorp has not explained why it is important to address 174 MW or 200 MW or more of [PacifiCorp's 1000 MW capacity deficit] but not the remain[der],"[34] a statement that also appears to rely on a misunderstanding of the role of FOTs in the IRP process. Through its IRP, the Company evaluated different portfolios and resource options. It then identified as the best performing portfolio one that meets its capacity need with new renewables and FOTs.

III. Securing PTC Requalification through Wind Repowering Might Not be as Difficult to Achieve as Staff Appears to Assume

Renewable Northwest continues to recommend that the Commission acknowledge the wind repowering. PacifiCorp describes the wind repowering project as the "replace[ment of] equipment at existing wind facilities with modern technology to improve efficiency, increase energy production, extend the operational life, reduce run-rate operating costs, reduce net power costs, and deliver substantial federal PTC benefits that will be passed on to customers".[35] Specifically, PacifiCorp seeks to repower at least 999 MW of existing wind resources by 2020 (Action Item 1a). Renewable Northwest described PacifiCorp's three phase preferred portfolio selection process in our opening comments.[36] As a result of this selection process, the repowering portfolio OP-REP was identified as the top performing portfolio of the second phase, and so wind repowering became one of the bases for final portfolio section in phase 3.[37]

Staff does not recommend acknowledgment of Action Item 1a because of its belief that it "does not meet a capacity, energy, regulatory, or reliability need".[38] However, as CUB highlighted, "[r]epowering plants is not new."[39] In fact, as CUB points out, "[u]tilities have repowered hydro plants to increase production".[40] Still, Staff finds CUB's perspective "ultimately unpersuasive".[41]

Renewable Northwest is concerned that Staff may not have a complete understanding of how existing wind projects use repowering to requalify for the PTC, and that this potential lack of understanding is influencing Staff's recommendation. According to Staff, "[i]n order of [sic]

[34] Staff Report at 19.
[35] PacifiCorp Response Comments at 18.
[36] Renewable Northwest Opening Comments at 5–13.
[37] Renewable Northwest Opening Comments at 10–12.
[38] Staff Report at 20.
[39] CUB Comments on Staff's Recommendations at 10.
[40] *Id*.
[41] Staff Report at 20.

qualify for the appropriate tax treatment to generate PTCs, over 80 percent of the value of the repowered turbines must be newly installed. Such an investment is not analogous to the maintenance associated with periodically updating generating equipment at hydro facilities."[42] However, Staff's emphasis on "over 80 percent of the value" overlooks what goes into to calculating the remaining 20 percent of a facility's value.

The IRS's 80/20 Rule for wind requalification for the PTC calculates the fair market value of the remaining components taking into account depreciation.[43] As a result, the "20 percent" can be a smaller than expected value, and hence the "80 percent" investment requirement may not be as difficult to reach as Staff appears to believe.

A. Using the Five Percent Safe Harbor to Requalify for the PTC

Our Opening Comments quoted the Internal Revenue Service ("IRS") guidance on "[a]pplication of safe harbor provision to retrofitting".[44] Initially, a repowered wind resource must meet the "Five Percent Safe Harbor" requirement.[45] This safe harbor requires "five percent or more of the total cost of the facility" to be incurred and, thereafter, "continuous efforts to advance towards completion of the facility."[46] Notice 2017–04 clarifies that construction starts according to which of these two options occurs first after June 6, 2016.[47]

In terms of the application of the safe harbor provision to repowered facilities, prior IRS guidance provided that a facility could qualify as "originally placed in service", and hence be eligible for the PTC at a given level, even though "it contains some used property, provided the fair market value of the used property is not more than 20 percent of the facility's total value (the cost of the new property plus the value of the used property) (80/20 Rule)."[48] Notice 2017–04 clarified that "all costs properly included in the depreciable basis of the facility are taken into account,"[49] thereby "including indirect costs that may be capitalized into the tax basis of the new facility."[50]

[42] Staff Report at 20.
[43] IRS Notice 2017–04, Section 4, Prohibition Against Combining Methods by which to Satisfy the Beginning of Construction Requirement www.irs.gov/irb/2017-04_IRB/ar10.html.
[44] Renewable Northwest Opening Comments at 5.
[45] IRS Notice 2016-31, Section 4, Additional Issues Regarding the Continuity Requirement, June 6, 2016, https://www.irs.gov/irb/2016-23_IRB/ar07.html#d0e709.
[46] IRS Notice 2013-20, Section 5, Safe Harbor, May 13, 2013, www.irs.gov/irb/2013-20_IRB/ar09.html#d0e2324.
[47] IRS Notice 2017–04, Section 4, Prohibition Against Combining Methods by which to Satisfy the Beginning of Construction Requirement www.irs.gov/irb/2017-04_IRB/ar10.html.
[48] IRS Notice 2013–20.
[49] IRS Notice 2017–04, Section 4, Prohibition Against Combining Methods by which to Satisfy the Beginning of Construction Requirement www.irs.gov/irb/2017-04_IRB/ar10.html.
[50] Baker Botts, IRS Clarifies Earlier Guidance on Production Tax Credit Safe Harbors, Jan. 5, 2017.

B. Calculating the Fair Market Value of the Used Property

Fair market value ("FMV") is "the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of relevant facts."[51] For repowered projects to qualify for a PTC extension, four times the FMV of the remaining turbine components must be invested, taking into account depreciation (Notice 2017–04) and technical obsolescence. The FMV of a ten year old (post-PTC generating) turbine tower and pad without any nacelle or blades (the "20" in the 80/20 rule) is likely relatively low compared to that of a new nacelle and set of blades (the "80" in the 80/20" rule). As a result, while repowering wind could be considered analogous to hydro repowering, a dam could still contain considerable FMV with the turbines removed, but this is not necessarily the case for a wind project.

According to Staff, because "over 80 percent of the value of the repowered turbines must be newly installed [...] [s]uch an investment is not analogous to the maintenance associated with periodically updating generating equipment at hydro facilities."[52] Staff is correct in that the FMV of the new repowering investment must represent 80 percent of the value of the newly installed project. However, Staff's argument appears not to take into account that the FMV of the remaining 20 percent may represent a smaller amount in absolute terms than would be intuitively expected owing to depreciation and obsolescence. While still a significant investment, the nuances of the tax code and of the 80/20 rule mean that it may not be as challenging to repower existing wind facilities and qualify for the PTC as Staff appears to believe.

IV. Conclusion

Renewable Northwest is grateful to all stakeholders, Staff, and the Commissioners for the work and effort undertaken in analyzing and considering PacifiCorp's 2017 IRP.

As these and our prior comments highlight, PacifiCorp has shown that its plans for repowering (Action Item 1a), new wind (Action Item 1b), and transmission (Action Item 2a) are reasonable. Therefore, we encourage the Commission to acknowledge them.

Renewable Northwest disagrees with the recommendation by Staff that the Commission not acknowledge new wind (Action Item 1b) and transmission (Action Item 2a). Staff's argument that PacifiCorp does not need the new renewables, and hence the transmission, is based on a conflation between PacifiCorp's capacity need with FOTs, the Company's capacity need without

[51] Code of Federal Regulations, Title 26: Internal Revenue, §20.2031-1(4)(b).
[52] Staff Report at 20.

FOTs, and the capacity contribution of resources to potentially meet some portion of the utility's capacity need.

We also disagree with Staff's recommendation that PacifiCorp's repowering plans (Action Item 1a) not be acknowledged. The IRS guidance on requalifying wind projects for the PTCs indicates that achieving the necessary investment may not be as difficult to achieve as Staff appears to assume.

Renewable Northwest looks forward to the Public Meeting on December 5, 2017, and to the Commissioners deliberations at the Special Public Meeting on December 11, 2017.

Respectfully submitted this 28th day of November, 2017.

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