BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 77

In the Matter of PACIFICORP, dba PACIFIC POWER's, 2021 Integrated Resource Plan	THE RENEWABLE ENERGY COALITION'S OPENING COMMENTS

I. INTRODUCTION

The Renewable Energy Coalition (the "Coalition") respectfully submit these Opening Comments for consideration by the Oregon Public Utility Commission (the "Commission" or "OPUC") in the matter of PacifiCorp's 2021 Integrated Resource Plan ("IRP"). PacifiCorp's 2021 IRP seems to assume that no qualifying facilities ("QFs") will renew their contracts. Further, it does not appear PacifiCorp produced a sensitivity analysis nor provided an adequate explanation of the impact of renewing QF contracts on its load resource balance, or if it did it is not clearly articulated, as directed by Commission Order No. 20-186 in LC 70.

QFs provide value to the system when they renew their power purchase agreements ("PPAs"). In the 2019 IRP docket, PacifiCorp provided the results of some modeling that confirmed the Coalition's assertions that QFs provide significant capacity value to PacifiCorp's system. PacifiCorp modeled the impact of renewing QFs on its resource acquisition decisions. The modeling revealed that by assuming that all existing QFs will renew their contracts at the end of their current PPAs, PacifiCorp would defer the acquisition of a simple-cycle combustion turbine ("SCCT") by three years.

PacifiCorp should recognize the value QFs provide in its IRP and should appropriately compensate them for this value when they renew their PPAs.

PacifiCorp's assumption that no QFs renew their contracts feeds into PacifiCorp's avoided cost pricing for renewing QFs. When existing QFs renew their contracts, they suddenly go from being paid for their capacity for years at the end of their prior PPAs, to being paid nothing for their capacity for years at the beginning of their new PPA. Nothing, practically speaking, has changed. The QF is still providing the same value to PacifiCorp's system, it is just no longer being paid for it. This result must be remedied, especially in light of PacifiCorp's analysis confirming this conclusion.

Thus, the Commission should acknowledge this value and affirmatively direct PacifiCorp to assume in its IRP that all or a reasonable number of existing QFs will renew their contracts and that these renewing QFs provide value to PacifiCorp and ratepayers. If the Commission directs PacifiCorp to determine an estimate of the number of existing QFs that will renew their contracts (rather than directing PacifiCorp to assume that QFs renew their contracts), then that should be completed prior to PacifiCorp's next avoided cost update in October 2022. Further, the Commission should direct PacifiCorp to produce the sensitivity analysis regarding QF renewal.

II. COMMENTS

The value that QFs provide to PacifiCorp and treatment of those QFs in the IRP is relevant because QF avoided cost prices often directly flow out of IRP assumptions. When a QF enters into a PPA with an Oregon utility, there is usually a period of time at the beginning of the contract during which the utility is "resource sufficient." In other words, a period of time in which the utility does not have an immediate need for resources. PacifiCorp is “resource deficient” during the later years when it needs resources. Generally, this resource need is reflected in avoided cost prices as higher prices in the later contract years because the QF can help defer those future capacity additions.

However, when an existing QF renews its contract, the current structure of avoided costs means that such QFs will *not* be compensated for the capacity value at the beginning of a new or renewed contact. This is despite the QF having previously been providing significant capacity value to the utility and being compensated for that capacity value at the end of their last contract. PacifiCorp historically assumed that all small QFs renewed their contracts. After the Commission directed PacifiCorp to pay QFs for the value that they provide when they renew their contract, PacifiCorp changed its IRP assumptions to assume that no QFs will renew their contract. PacifiCorp made this change solely to avoid compliance with the Commission’s direction. As described below, this is an incorrect assumption, and PacifiCorp should be required to assume that QFs will renew their contracts and compensate them accordingly for this value provided.

A. PacifiCorp’s QF Assumptions Are Not Consistent with Prudent and Reasonable Planning

The Commission should not acknowledge PacifiCorp’s QF renewal assumptions because they are unreasonable and not consistent with least cost and least risk planning. In addition, PacifiCorp’s assumptions should be rejected because they are not the type of reasonable and accurate assumptions that the Commission would allow a utility to make when setting fair, just, and reasonable retail rates.

The Commission has explained that the IRP process is designed so "[the] primary goal must be 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."[1] To achieve this selection, the Commission requires the utilities to "consider all costs with a reasonable likelihood of being included in rates over the long term, which extends beyond the planning horizon and the life of the resource."[2]

QF contracts, even more than other contracts without a mandatory purchase obligation, should be appropriately and reasonably forecasted like other resources and costs that are included in rates. QFs that entered into a contract, but are not yet commercially operational, are generally expected to come on line, but they have a much lower chance of reaching their commercial operation date than existing QFs that are already operating. In the context of new QFs, the Commission does not allow the utility in its retail rate setting process to simply assume either none or all the QFs will timely reach their commercial operation date, but instead they must come up with a reasonable forecast.[3]

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1 *In re Commission Investigation into Integrated Resource Planning Requirements*, Docket No. UM 1056, Order No. 07-002 at 5 (Jan. 8, 2007).

2 Docket No. UM 1056, Order No. 07-002 at 5.

3 *In Re Idaho Power Company 2020 Annual Power Cost Update*, Docket No. UE 366, Order No. 20-164 at 5-6 (May 21, 2020) (adopting another stipulation modifying the Contract Delay Rate ("CDR") approach); *In Re PacifiCorp dba Pacific Power 2018 Transition Adjustment Mechanism*, Docket No. UE 323, Order No. 17-444 at 17 (Nov. 1, 2017) (ordering PacifiCorp to "use a three year rolling average of delays to produce a CDR, apply this CDR to the CODs reported in the indicative update, and adjust the TAM year forecast based on the delay days"); *In Re PGE 2020 Annual Power Cost Update Tariff (Schedule 125),* Docket No. UE 359, Order No. 19-329 at 2, App. A at 3-4 (Oct. 3, 2019) (PGE must "derate the expected generation of new QFs that have not achieved

The Coalition is not aware of any other input or assumption in PacifiCorp's IRP in which it is known for certaint that the cost will be incurred (here the renewal of most existing QF contracts), but that PacifiCorp simply ignores the costs. This is inconsistent with the Commission's direction for PacifiCorp to consider all costs with a reasonable likelihood of being included in rates over the long term and should not be acknowledged.

B. The Existing QF Capacity Issue Has Been Before the Commission Since 2014

Existing QFs provide capacity value to PacifiCorp and should continue to be paid for that value when they renew their PPAs commencing with the first day of the new contract. This issue has been developed over the course of the last several years and PacifiCorp was already required to take steps towards addressing this issue as a follow-up to its 2017 and 2019 IRPs.

The Coalition has raised this issue in multiple prior proceedings and, despite Commission rulings in the Coalition's favor, PacifiCorp has failed to implement any changes. In Docket No. UM 1610, the Commission agreed "that a certain amount of capacity may not be valued if utilities assume in their IRPs that existing QFs nearing contract expiration will automatically renew."[4] This was in response to the QFs' assertions that "[t]he utilities plan in their IRPs on existing QFs to renew their contracts, thereby allowing deferral of capacity investments, yet QFs are not compensated for the

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commercial operation by November 1st of each year" and to set the derate "based on the most recent four-year historical annual average of actual versus projected QF costs.").

4 *In re Investigation into Qualifying Facility Contracting and Pricing*, Docket No. UM 1610, Order No. 16-174 at 19 (May 13, 2016).

capacity value associated with the deferral and are effectively providing it for free."[5] The Commission then directed each utility to work with stakeholders to address this issue in its next IRP.[6]

In PacifiCorp's next IRP, it asserted that it complied with the Commission's order "by *not* assuming QFs will renew."[7] PacifiCorp then assumed that *no* QFs would renew their contracts. PacifiCorp changed its assumptions not based on any new information, but to avoid conducting any analysis or paying QFs for the value associated with those that renew their contracts.

The Commission acknowledged that "non-renewal may not be the best planning assumption when many (or most) QFs do, in fact, renew."[8] The Commission then, directed "PacifiCorp, Staff and parties [to] discuss a potential study of the capacity value of renewing QFs, and Staff shall bring this issue to a public meeting before the 2017 IRP Update."[9] The parties began working together in August through October of 2018. On October 22, 2018, the Coalition sent PacifiCorp an email with their recommendations.[10] That is where this issue was left, until PacifiCorp filed its 2019 IRP.

In the 2019 IRP, the Coalition inquired into the status of PacifiCorp's study in a data request, to which PacifiCorp responded on November 26, 2019 that it "has

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5 Docket No. UM 1610, Order No. 16-174 at 19.
6 Docket No. UM 1610, Order No. 16-174 at 19.
7 *In re PacifiCorp 2017 Integrated Resource Plan*, Docket No. LC 67, Order No. 18-138 at 12 (Apr. 27, 2018) (emphasis added).
8 Docket No. LC 67, Order No. 18-138 at 12.
9 Docket No. LC 67, Order No. 18-138, Appendix A at 22.
10 *In re PacifiCorp 2019 Integrated Resource Plan*, Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment A (Jan. 10, 2020).

committed to running a study which assumes the renewal of [QFs] and will supplement the response…as soon as the results of the extended QFs study becomes available."[11] As discussed further below, PacifiCorp provided a supplement to that data response the following month that finally provided study results.

In the Commission's Order acknowledging PacifiCorp's 2019 IRP, the Commission stated:

> Regarding the QF issues, we accept PacifiCorp's commitment to produce a sensitivity or other explanation of the impact of renewing QFs on its load resource balance and direct PacifiCorp to include this in its 2021 IRP. We appreciate Staff and REC showing us a process for linking the quantification of QF capacity with the valuation of that capacity in avoided cost rates. We expect that QF renewals provide some capacity value and will consider this issue further in other proceedings.[12]

Thus, the Commission acknowledged that QF renewals provide some capacity value and directed PacifiCorp to complete a sensitivity analysis regarding QF renewals on its load resource balance or provide another explanation of the impact of renewing QFs.

From the Coalition's review of PacifiCorp's 2021 IRP, it does not appear PacifiCorp completed the analysis.[13] PacifiCorp should have provided an explanation to comply with the Commission's Order. From the IRP, the only possible explanation would be in Tables 6.11 and 6.12 that show the annual capacity balances for summer and

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[11] Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment B (PacifiCorp's Response to the Coalition's Data Request 4 dated Nov. 26, 2019).

[12] Docket No. LC 70, Order No. 20-186 at 13 (June 8, 2020).

[13] *See* PacifiCorp's 2021 IRP, Chapter 6 and Appendix B at 36.

winter peaks where QF amounts are predicted to the end of 2040, but the amounts steadily decrease to zero or very close to it by the end of 2040.[14]

This explanation should not be viewed as complying with the Commission directive. This explanation provides no insight into the effects on PacifiCorp's load resource balance if QFs were to renew their contracts. Instead, it only shows what would happen in the unrealistic future scenario in which QFs do not renew their contracts.

This explanation also does not align with the Commission's directives in other IRPs. In Idaho Power's 2019 IRP, the Commission concluded that Idaho Power was not accurately estimating whether certain QFs were renewing their contracts ordering Idaho Power to develop "reasonable assumptions through a sensitivity analysis" and "explain how the sensitivities resulting from the study would affect the IRP's preferred portfolio and action plan if incorporated" for its next IRP.[15] Further, in Portland General Electric Company's ("PGE's") 2019 IRP, the Commission ordered PGE to "refresh the same inputs that it updated in November 2019 in this proceeding, with…updated QF levels and sensitivities[.]"[16] All of these IRP directives to produce QF sensitivity analyses suggest the Commission's intent in PacifiCorp's 2019 IRP acknowledgement was for PacifiCorp to produce a similar sensitivity analysis or equivalent explanation. PacifiCorp's explanation in its 2021 IRP is not adequate or equivalent to a sensitivity analysis.

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14 PacifiCorp's 2021 IRP, Tables 6.11 & 6.12 at 153-57; *See* PacifiCorp's Response to the Coalition's Data Request 1.4 at 1-2 (Attachment B).

15 *In re Idaho Power Company 2019 Integrated Resource Plan*, Docket No. LC 74, Order No. 21-184 at 19-20 (June 4, 2021).

16 *In re Portland General Electric Company 2019 Integrated Resource Plan*, Docket No. LC 73, Order No. 20-152 at 12 (May 6, 2020).

In UM 1728, Portland General Electric has also committed to develop "QF online and renewal sensitivity analyses" in advance of its next IRP.[17] Specifically, PGE stated

> For QFs with contracts that are executed but that are not yet operational at the time of the snapshot, PGE will examine factors including but not be limited to: the historic percentage of PGE's QFs having reached commercial operations, the opportunities to sell power to other utilities, sophistication and experience of project developers, contractual provisions, technology, and interconnection risks. At least one analysis will start with PGE's historic percentage of PGE's QFs that have reached commercial operations. For QF renewals, PGE will examine factors including but not limited to: the historic percentage of PGE's QFs that have renewed their contracts, the sophistication and experience of project developers, contractual provisions, technology, the opportunity to sell power to other utilities, and interconnection risks. At least one analysis will start with PGE's historic percentage of PGE's QFs that have renewed their contracts. PGE will also review the historic percentage of QFs reaching completion and renewals for other utilities.[18]

Therefore, despite being before the Commission since at least 2014 (Phase I of UM 1610), the Coalition raising it numerous times since then, and a lot of work already being done on this issue, PacifiCorp as of December 2021 has not completed the sensitivity analysis or acknowledged the benefit QF renewals provide for PacifiCorp's capacity. This has gone on long enough. PacifiCorp should be directed in this proceeding to provide the sensitivity analysis and appropriately account for the value that existing QFs provide.

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[17] *In re PGE Updates to Schedule 201 QF (10 MW or less) Avoided Cost*, Docket No. UM 1728, Order No. 21-215, Appendix A at 12 (July 6, 2021).

[18] Docket No. UM 1728, Order No. 21-215, Appendix A at 12.

C. PacifiCorp Should Assume that All or the Vast Majority of Operating QFs Will Renew and Enter into New PPAs

It is not reasonable to assume that no QFs will continue operating and delivering power to PacifiCorp beyond their current PPA. Utilities "should consider all costs with a reasonable likelihood of being included in rates over the long term, which extends beyond the planning horizon and the life of the resource."[19] In PacifiCorp's 2021 IRP, PacifiCorp assumes no QFs will renew their contracts.[20] The Commission should direct PacifiCorp to assume that all or a reasonable amount of QFs will renew their PPAs.

It is more likely than not that a QF will renew or seek to enter a new contract with PacifiCorp at the conclusion of its current contract. A new QF can often decide in which utility's service territory it wants to locate to achieve the best outcome. However, once operational, the QF has fewer options to sell its electricity, because it will likely incur significant transmission charges if it wants to sell to a more distant utility. While some QFs are able to sell to a more distant utility, the vast majority continue to sell to their currently interconnected utility. Therefore, existing QFs are more likely to renew or enter a new contract with the utility to which they are already directly interconnected.

PacifiCorp's own records show that virtually all QFs will continue operating and renew their contracts. At the time of PacifiCorp's last IRP, of the thirty-six QFs that have

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19 Docket No. UM 1056, Order No. 07-047, Appendix A at 2 (Feb. 9, 2007).

20 PacifiCorp's 2021 IRP, Figure 6.2 – Contract Capacity in the 2021 IRP Summer Load and Resource Balance at 148 (depicting a steady decline of QF contracts from 2021 to virtually none in 2040); PacifiCorp's Response to the Coalition's Data Request 1.3 (stating "In PacifiCorp's 2021 [IRP], [QFs] are existing / executed QF [PPAs] and they are not assumed to renew as they expire.") (Attachment A).

had a PPA with PacifiCorp expire, only one has shut down.[21] The vast majority have renewed or executed a new contract with PacifiCorp and will continue to operate and provide significant value to PacifiCorp's system for years to come. For example, Biomass One, L.P., an approximately 30 MW biomass facility, initially executed a PPA with PacifiCorp in 1987, which expired in 2011, and is currently operating under a renewed contract that does not expire until 2036.[22] Farmers Irrigation District, which operates a 4.15 MW hydro facility, initially executed a PPA in 1983, which expired in 2010, and continues to operate under a renewed PPA expiring in 2025.[23] These QFs are examples of the types of businesses that have been providing PacifiCorp with power for decades yet are not fully compensated for the capacity value they provide.

These QFs show that a QF's lifespan significantly outlasts that of a single PPA. Many of these facilities are built to last 100 years, and a single PPA entered into now is only a maximum of 20 years long. It would be an extreme rarity for one of these plants to shut down after the initial PPA. This is especially true because many QFs likely acquire their up-front capital financing based only on the initial PPA, so continuing to operate beyond that first PPA, could theoretically be under much more favorable economics.

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21 Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment B (PacifiCorp's Response to Coalition Data Request 1 and Attachment REC 1 dated Nov. 26, 2019). Note: one other QF appears to have renewed at the expiration of its initial PPA, but then apparently "self-terminated." It is not clear whether this QF has shut down completely or chose to sell to someone else.

22 Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment B.

23 Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment B.

Thus, it is more likely that all QFs will renew or that nearly all will renew, and at a minimum, PacifiCorp's default assumption that no QFs renew is not correct. If the Commission does not direct PacifiCorp to assume that all QFs renew their contracts, then it should direct PacifiCorp to develop QF online and renewal sensitivity analyses similar to the stipulation in UM 1728.

D. QFs Provide Significant Capacity Value to PacifiCorp

QFs provide significant value to PacifiCorp. PacifiCorp ultimately provided a study in response to the Commission's Order in LC 67, which models QF renewals.[24] The results appear significant.[25] Assuming that all QF PPAs continued through the end of the study period, an SCCT that would have been constructed in 2026 is pushed out to 2029, and an additional SCCT replaces some battery storage in 2029.[26]

This analysis reveals that assuming QF renewals can have a major impact on PacifiCorp's forecasted capacity needs and the more fundamental point that the Coalition has been making since 2014: existing QFs already provide significant capacity value and should be compensated for it when they renew.

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24 *See* Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment B (PacifiCorp's 1st Supplemental Response to Coalition Data Request 4 dated Dec. 18, 2019).

25 The Coalition has not independently verified the accuracy of PacifiCorp's methodology in that study.

26 *See* Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment B (PacifiCorp's 1st Supplemental Response to Coalition Data Request 4 dated Dec. 18, 2019).

E. The Commission Can Acknowledge the Value of Existing QF Capacity in Two Possible Ways

In the IRP process, the Commission should acknowledge that QFs provide significant capacity value to PacifiCorp and require that PacifiCorp recognize such value as well. While the Commission does not address QF avoided cost pricing in the IRP process, the assumptions made in the IRP often flow directly into the avoided costs. Here, the Commission can direct PacifiCorp implement two possible solutions to compensate existing QFs for the significant capacity value they provide.

First, the Commission could require that PacifiCorp simply continue paying a QF the capacity payment at the beginning of their renewed PPA, i.e., there would be no "sufficiency period" at the beginning of the new contract. This is how the Idaho Public Utility Commission ("IPUC") has addressed this issue. The IPUC

> [found] it reasonable for utilities to establish capacity deficiency at the time the initial. . . contract is signed. As long as the QF renews its contract and continuously sells power to the utility, the QF is entitled to capacity based on the capacity deficiency date established at the time of its initial contract.[27]

The IPUC reasoned that "[t]his adjustment recognizes that in ensuing contract periods, the QF is considered part of the utility's resource stack and will be contributing to reducing the utility's need for capacity."[28]

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27 *In re Idaho Power Company's, Avista Corporation's, and Rocky Mountain Power Company's Petitions to Modify Terms and Conditions of PURPA Purchase Agreements*, IPUC Docket Nos. IPC-E-15-01, AVU-E-15-01, PAC-E-15-03, Order No. 33357 at 25-26 (Aug. 20, 2015).

28 IPUC Docket Nos. IPC-E-15-01, AVU-E-15-01, PAC-E-15-03, Order No. 33357 at 26.

Second, the Commission could direct PacifiCorp to determine exactly what capacity value the QFs provide, and simply compensate them for that value. The deferral of the construction of a gas plant and the avoidance of battery storage is of significant value to PacifiCorp and its ratepayers. The Commission should not determine the specific amount of value at this time but should allow Staff and stakeholders to review and vet PacifiCorp's analysis when the rates are actually calculated. This is what the Commission directed in UM 1610, but what has not occurred to date.

However, it is far more difficult to determine this appropriate value with the analysis that PacifiCorp has performed in this proceeding. Therefore, the Commission should direct PacifiCorp to use reasonable assumptions of QF contract renewals and provide this estimate prior to its next avoided cost update.

III. CONCLUSION

For the reasons articulated herein, the Commission should not acknowledge PacifiCorp's 2021 IRP assumptions, direct PacifiCorp to assume that QFs will renew or enter new contracts with PacifiCorp at the end of their current contracts, require PacifiCorp to complete the sensitivity analysis as required by the Commission Order acknowledging PacifiCorp's 2019 IRP, and require PacifiCorp to develop a reasonable estimate of the capacity value that renewing QFs provide.

Dated this 3rd day of December 2021.

Respectfully submitted,

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Attachment A

PacifiCorp Response to Renewable Energy Coalition Data Request 1.3 in LC 77 (December 2, 2021)

REC Data Request 1.3

Please provide PacifiCorp's forecast of new qualifying facilities that it expects to enter into contracts with and be constructed over its planning period. Please provide the expected megawatts, average megawatts and technology type for such new qualifying facilities. If PacifiCorp has not performed such a forecast, please explain why.

Response to REC Data Request 1.3

In PacifiCorp's 2021 Integrated Resource Plan (IRP), qualifying facilities (QF) are existing / executed QF power purchase agreements (PPA) and they are not assumed to renew as they expire.

The Company's 2021 IRP identifies cost-effective portfolio that includes proxy resource additions to reliably serve customers. However, the IRP does not attempt to distinguish the type of transaction for those proxy resources, which could include: a self-build or build-transfer agreement (BTA) leading to utility ownership or a QF or non-QF PPA. Therefore the new renewable resources identified in the 2021 IRP preferred portfolio could potentially be incorporated in the Company's portfolio via QF PPAs. Delineating the type of transaction would not impact the preferred portfolio, so it was considered beyond the scope of the 2021 IRP.

Please also refer to the Company's response to data request REC 1.2.

Attachment B

PacifiCorp Response to Renewable Energy Coalition Data Request 1.4 in LC 77 (December 3, 2021)

REC Data Request 1.4

Please refer to Oregon Public Utility Commission Order No. 18-138 from LC 67, PacifiCorp's 2017 IRP, page 12, where it notes:

> In addition. Renewable Energy Coalition asserts that the company should be required to actually study the capacity benefits that qualifying facilities (QFs) provide, as directed in docket UM 1610. PacifiCorp responds that it has complied with the order by not assuming QFs will renew. We acknowledge that non-renewal may not be the best planning assumption when many (or most) QFs do, in fact, renew, but question the value of additional studies of the capacity of renewing QFs. We direct Staff to work with intervenors and bring this issue to a public meeting so that we can make a decision regarding whether a new study of existing QF capacity would be useful and how existing QF contract renewals should be modeled in the IRP.

What is the status of PacifiCorp's efforts to model the capacity value of QFs?

Response to REC Data Request 1.4

The relevant order for PacifiCorp's 2021 Integrated Resource Plan (IRP), Order No. 20-186, page 13, states "Regarding the QF issues, we accept PacifiCorp's commitment to produce a sensitivity or other explanation of the impact of renewing QFs on its load resource balance and direct PacifiCorp to include this in its 2021 IRP."

PacifiCorp's fulfillment of this order is addressed in the 2021 IRP, Volume II, Appendix B (Regulatory Compliance), page 36, which states "PacifiCorp has included an explanation of the impact of renewing QFs on its load resource balance as part of Volume I, Chapter 6 (Load and Resource Balance)."

With this understanding, the Company additionally responds as follows:

The Company's 2021 IRP preferred portfolio is the least-cost, least-risk combination of proxy resources that could be added to ensure reliable service for customers. Embedded within that portfolio result is the value provided by existing qualifying facility (QF) power purchase agreements (PPA). To the extent that additional capacity is provided by QFs, the quantity and composition of proxy resource selections would be expected to change, but this is little different from the change in resources that occurs when project-specific bids are received from a request for proposals (RFP). The Company would note that its 2021 IRP shows that less than 200 megawatt (MW) (nameplate) of QF PPAs are expiring in the first 10 years of its 2021 IRP – please refer to the 2021 IRP, Volume I, Chapter 9 (Modeling and Portfolio Selection Results), Table 9.17 (PacifiCorp's 2021 IRP

Preferred Portfolio). For additional detail on modeled QFs, please refer to the confidential data disk accompanying the 2021 IRP, specifically folder "_Preferred Portfolio CONF\LT," file "18609_21IRP 20yr_P02-MM-CETA CONF .xlsx," tab "Portfolio Data," column T.

The majority of the expiring QF capacity through 2030 is from wind resources with a relatively low capacity contribution. As a result of the quantity and composition of these near term expirations, a higher forecast of QF purchases would not be expected to result in significant portfolio changes until the latter half of the IRP study horizon.

The Company is also continuing to participate in the Public Utility Commission of Oregon's General Capacity Investigation in Docket UM 2011, which is addressing this topic.