BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 84

In the Matter of

THE RENEWABLE ENERGY COALITION'S OPENING

IDAHO POWER COMPANY,

COMMENTS

2023 Integrated Resource Plan.

I. INTRODUCTION

The Renewable Energy Coalition (the "Coalition") respectfully submits these Opening Comments for consideration by the Oregon Public Utility Commission (the "Commission" or "OPUC") in the matter of Idaho Power Company's ("Idaho Power's") 2023 Integrated Resource Plan ("IRP"). The Coalition supports Idaho Power's continued planning assumption that 100 percent of non-wind qualifying facilities ("QFs") will renew after contract expiration. However, the Coalition does not support Idaho Power's planning assumption that no wind QFs will renew after contract expiration and no reasonable forecast of new QFs. The Coalition instead recommends a wind QF renewal percentage of 85 percent based on discussions with current wind QF operators, historic QF renewal rates for all resource types for other utilities, and more reasonable estimates of the operational realities of wind facilities, which will likely continue to operate or repower and sell to their interconnected utility rather than shut down or wheel power off system.

II. COMMENTS

The Commission directed Idaho Power to revisit its wind QF renewal assumptions and new QF forecast assumptions, but Idaho Power only addressed these assumptions in a scenario analysis instead of its base planning assumptions. As described below, these are incorrect assumptions, and Idaho Power should be required to assume that wind QFs will renew their contracts and compensate them accordingly for this value provided.

Idaho Power's 2021 IRP assumed a 25 percent wind QF renewal rate, but the Commission, Staff, and Coalition were concerned that number was too low, and the Commission directed Idaho Power to revisit these assumptions "from an empirical basis". Idaho Power did not comply with the Commission's direction. First, Idaho Power only addressed these assumptions in a scenario analysis instead of its base planning assumptions. Second, Idaho Power did not revisit its assumptions from an empirical basis. Instead, Idaho Power appears to have conducted limited and cursory outreach to one of its wind QFs and no other analysis of the likelihood of contract renewals.

The Coalition obtained project owner contact information on January 5, 2024, conducted outreach to wind QF operators within the last month, and most of those projects responded stating they intend to renew after their contracts expire. These wind QF projects will not just go away after contract expiration. Typically, wind projects will

In re Idaho Power Company 2021 IRP, Docket No. LC 78, Order No. 23-004, Appendix A at 36 (Jan. 13, 2023).

² 2023 IRP at 128 (Sept. 29, 2023).

repower instead of ceasing operation because the major upfront capital costs have already been spent and it is economic to continue to sell power to the utility. Additionally, other utilities have higher renewal rates than Idaho Power including PacifiCorp with a 79 percent renewal rate for QFs and Portland General Electric Company ("PGE") with a 75 percent renewal rate for QFs.

Therefore, the Commission should not acknowledge the wind QF renewal planning assumption and the forecast of new QFs in this IRP and direct Idaho Power to update these base planning assumptions and update its preferred portfolio. The Coalition recommends a wind QF renewal percentage of 85 percent based on discussions with current wind QF operators.

These assumptions feed into Idaho Power's planning assumptions, future resource procurements, and avoided cost pricing for QFs because QFs provide value to Idaho Power, or any utility, and planning of QFs impacts the utility's future resource acquisition amounts and dates. For example, if the utility assumes no wind QFs will renew instead of estimating a reasonable assumption of wind QF renewals, then the utility will likely overestimate its resource needs and over procure resources. This is uneconomic and could be harmful to ratepayers. These wind QFs could avoid future resource needs if they renew, which it is likely they will.

Regarding avoided cost pricing, when a QF enters into a contract 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. Idaho Power 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 suddenly go from being paid for their capacity for years at the end of their prior contracts, to *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. Nothing, practically speaking, has changed. The QF is still providing the same value to Idaho Power's system, it is just no longer being paid for it. While it will be an issue to be addressed in Docket No. UM 2000, this absurd result must be eventually remedied.

It is important to accurately plan, or to plan as best the utility can. Here, Idaho Power is inaccurately planning to artificially increase its resource need, over procure resources, and harm QFs related to avoided cost pricing. This is a self-fulfilling prophecy that can also result in other regulatory harms. For example, it can affect Idaho Power's capacity needs, wind integration costs, access to transmission, rate case cost recovery, and more. Thus, the Commission should not acknowledge the wind QF renewal planning assumption and the forecast of new QFs in this IRP and direct Idaho Power to update these base planning assumptions and update its preferred portfolio. The Coalition recommends a wind QF renewal percentage of 85 percent based on discussions with current wind QF operators. Additionally, in UM 2000, the Commission should acknowledge that QFs provide significant capacity value to the utilities and require the utilities recognize such value as well.

A. Idaho Power's QF Assumptions Are Not Consistent with Prudent and Reasonable Planning

The Commission should not acknowledge Idaho Power's wind QF renewal assumptions because they are unreasonable and not consistent with least cost and least risk planning. In addition, Idaho Power'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."³

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."⁴

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. Existing QFs are extremely likely to renew their contracts because they have a statutory right to keep selling power to their interconnected utility. While they can sell power to another utility, they will incur additional wheeling expenses, which typically makes such sales uneconomic in the absence of significant differences in avoided cost pricing. Existing QFs could also sell power to their interconnected utility

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

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

through a bi-lateral transaction or in a request for proposals ("RFP"); however, utilities generally do not like to choose smaller facilities, even when they are more economic. In addition, Idaho Power's most recent RFP barred existing facilities selling to Idaho Power from participating. ⁵ QFs that entered into a contract, but are not yet commercially operational, are generally expected to come online, 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. ⁶

The Coalition is not aware of any other input or assumption in Idaho Power's IRP in which it is known for certain that the cost will be incurred (here the renewal of most existing wind QF contracts), but that Idaho Power simply ignores the costs and benefits.

This is inconsistent with the Commission's direction for Idaho Power to consider all costs

In re Idaho Power 2026 All-Source RFP, Docket No. UM 2255, Idaho Power's Final Draft 2026 All-Source RFP at 13 (Feb. 22, 2023) (Idaho Power accepted renewable resources that are "Existing (not currently delivering to [Idaho Power]) or proposed new in late-stage development") (emphasis added).

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 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.").

and benefits 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 wind QFs provide capacity value to Idaho Power and should continue to be paid for that value when they renew their contracts commencing with the first day of the new contract. This issue has been developed over the course of the last several years and PacifiCorp, PGE, and Idaho Power have all been directed to make changes to their respective QF planning assumptions.

The Coalition has raised this issue in multiple prior proceedings and, despite

Commission rulings in the Coalition's favor, Idaho Power has failed to implement
reasonable wind QF renewal assumptions. 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." 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 capacity value associated with the deferral and are effectively
providing it for free." The Commission then directed each utility to work with
stakeholders to address this issue in its next IRP. Existing QFs have been unpaid for

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

THE COALITION'S OPENING COMMENTS

⁸ Docket No. UM 1610, Order No. 16-174 at 19.

⁹ Docket No. UM 1610, Order No. 16-174 at 19.

nearly a decade now, but this issue is on the Commission's agenda to be addressed in UM 2000.¹⁰

1. PacifiCorp

In PacifiCorp's first IRP following UM 1610, the utility asserted that it complied with the Commission's order "by *not* assuming QFs will renew." 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 rejected PacifiCorp's inaccurate assumptions. The Coalition objected, and the Commission acknowledged that "non-renewal may not be the best planning assumption when many (or most) QFs do, in fact, renew[.]" 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." The parties began working together in August through October of 2018. On October 22, 2018, the Coalition sent PacifiCorp an email with their recommendations. That is where this issue was left, until PacifiCorp filed its 2019 IRP.

In re Staff Investigation into Broad Investigation of PURPA, Docket No. UM 2000, Staff's Process Proposal and Scope Update at 5-6 (Feb. 24, 2023).

In re PacifiCorp 2017 Integrated Resource Plan, Docket No. LC 67, Order No. 18-138 at 12 (Apr. 27, 2018) (emphasis added).

Docket No. LC 67, Order No. 18-138 at 12.

Docket No. LC 67, Order No. 18-138, Appendix A at 22.

In re PacifiCorp 2019 Integrated Resource Plan, Docket No. LC 70, Renewable Energy Coalition Opening Comments, Attachment A (Jan. 10, 2020).

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 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." 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. ¹⁶

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.

PacifiCorp again ignored the Commission and did not complete this analysis in its 2021 IRP, and the Commission again directed PacifiCorp to model a reasonable level of QF renewals in the 2023 IRP.¹⁷ After nearly seven years of Commission direction and

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).

Docket No. LC 70, Order No. 20-186 at 13 (June 8, 2020) (emphasis added).

In re PacifiCorp 2021 IRP, Docket No. LC 77, Order No. 22-178 at 14 (May 23, 2022).

litigation, in the 2023 IRP, PacifiCorp finalized analyzed historical rates to establish a 79 percent renewal rate such that each QF was assumed to have a 79 percent chance of renewing and its renewed size was reduced by 79 percent after contract expiration and continued indefinitely. While the Coalition prefers a more granular analysis than rough and limited historic review, the Coalition found this overall estimate minimally acceptable until the issue is revisited in a separate proceeding.

2. PGE

In 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[.]" In UM 1728, PGE had also committed to develop "QF online and renewal sensitivity analyses" in advance of its next IRP.²⁰ 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

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

In re PacifiCorp 2023 IRP and Clean Energy Plan, Docket No. LC 82, PacifiCorp's Amended 2023 IRP, Appendix B at 39 (May 31, 2023).

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).

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.²¹

In PGE's 2023 IRP, PGE assumed no QFs would renew, 50 percent of Schedule 201 QFs (QFs 10 MW and lower) would reach commercial operation, and 100 percent of Schedule 202 QFs (QFs larger than 10 MW) would reach commercial operation. The Coalition recommended the Commission not acknowledge PGE's QF assumptions and direct PGE to assume that a reasonable number of QFs will renew or otherwise enter new contracts with PGE at the end of their current contracts (such as 100%), and that fewer than all Schedule 202 QFs will develop (such as 50%). At the Public Meetings for acknowledgment, the Commission adopted Staff's recommendation to direct PGE to recalculate its avoided cost pricing inputs in its avoided cost compliance filing using a 75 percent QF renewal assumption and 75 percent success rate for Schedule 202 QFs. 24

3. Idaho Power

In Idaho Power's 2019 IRP, Idaho Power assumed no wind QFs would renew and the Commission concluded that Idaho Power was not accurately estimating whether certain QFs were renewing their contracts and ordered Idaho Power to develop

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

In re PGE 2023 IRP and Clean Energy Plan, Docket No. LC 80, 2023 IRP at 134 (July 6, 2023).

See generally, Docket No. LC 80, Renewable Energy Coalition's Comments (July 27, 2023).

Docket No. LC 80, January 25th Public Meeting at 2:13:00, available here: https://oregonpuc.granicus.com/player/clip/1269?view_id=2&redirect=true&h=20 4c447788ce23d3ffef2fa8bff17368; see also Docket No. LC 80, Staff Report at 23-25 (Dec. 14, 2023).

"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.²⁵ In Idaho Power's 2021 IRP, Idaho Power assumed 100 percent of non-wind QFs would renew and 25 percent of wind QFs would renew.²⁶ The Coalition recommended the Commission acknowledge these assumptions for the 2021 IRP, but recommended the Commission direct Idaho Power to revisit the wind QF renewal assumption during the next IRP.²⁷ The Commission adopted Staff's recommendations with Idaho Power's revision to revisit the wind QF renewal rate and develop a reasonable new QF forecast.²⁸

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, Idaho Power has not fully complied with the Commission's directive or acknowledged the benefit wind QF renewals provide for Idaho Power's capacity. This has gone on long enough. Idaho Power should be directed in this proceeding to update the wind QF renewal rate and new QF forecast in its base planning assumptions and update its preferred portfolio in this IRP to appropriately account for the value that existing QFs provide.

²⁵ In re Idaho Power 2019 IRP, Docket No. LC 74, Order No. 21-184 at 19-20 (June 4, 2021).

Docket No. LC 78, 2021 IRP at 122 (Dec. 30, 2021).

Docket No. LC 78, Renewable Energy Coalition's Opening Comments at 1 (July 7, 2022).

Docket No. LC 78, Order No. 23-004 at 5-6, 12.

C. Idaho Power Should Assume that All or the Vast Majority of Operating Wind QFs Will Renew and Enter into New Contracts

It is not reasonable to assume that no QFs will continue operating and delivering power to Idaho Power 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." It is unreasonable to assume no wind OFs will renew.

Idaho Power explained it assumed no wind QFs would renew because it has not received any "definitive, actionable" indication that wind QFs will enter into new contracts upon expiration of their current contracts based on informal discussions with one wind QF over the past few years.³⁰ Further, Idaho Power did not provide any factual documentation or copies of its communications with wind QF operators related to renewal.³¹ Idaho Power did provide comments from one QF wind operator on Idaho Power's Draft 2023 IRP that states its intent *to renew*.³²

This is not sufficient empirical analysis or outreach. It appears Idaho Power did not take the time to reach out to wind QF operators to determine if they intend to renew their projects or not. The Commission directed Idaho Power to revisit its wind QF renewal assumption, but instead Idaho Power reversed the progress it had made and once again assumed no wind QFs would renew in its base planning assumptions but completed

²⁹ Docket No. UM 1056, Order No. 07-047, Appendix A at 2 (Feb. 9, 2007).

See Idaho Power Responses to the Coalition's Data Requests 2 and 3 (Attachment A).

See Idaho Power Responses to the Coalition's Data Requests 4, 5, and 6 (Attachment A).

See Idaho Power Response to the Coalition's Data Request 6 (Attachment A).

a scenario analysis instead. Idaho Power had eight months to reach out to wind QF operators to determine a more reasonable wind QF renewal assumption, but Idaho Power did not do that. Idaho Power assumed their limited outreach was acceptable to justify their IRP assumptions.

The Coalition is not certain what Idaho Power needs for a "definitive, actionable" indication, but the Coalition reached out to the operators of the wind QF projects throughout the last month regarding wind QF renewal. 33 The Coalition has received responses from those projects and to date 30 of the 32 projects have informed the Coalition they intend to enter into contracts with Idaho Power after their current contracts expire or some have not yet made a final decision, which account for about 607 MW. 34 This is about 94 percent of the projects and about 97 percent of the Idaho Power wind QF contract capacity. 35 The other QFs that the Coalition was unable to contact in the last month also are likely to renew their contracts. If Idaho Power had similarly reached out to the wind QFs, then it likely would have received similar if not better results.

It is more likely than not that a QF will renew or seek to enter a new contract with Idaho Power 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

See Declaration of John R. Lowe (Attachment B).

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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.

Existing QFs also have already been constructed and are more economic to operate than new projects which have significant capital and interconnection costs and are riskier. Existing projects often have capital investments that require long-term planning, and with regards to wind, wind projects are likely to repower existing projects. Wind repowering allows projects to retrofit existing sites with new and/or updated technology. This results in increased productivity with more efficient wind turbines and cost-saving advantages due to less capital costs and use of existing grid connections and infrastructure.³⁶ Thus, if a wind QF can repower its project and get a favorable contract and pricing, then it is likely the wind QF will repower.

Idaho Power also explains that the approach of not assuming any wind QFs will renew "allows sufficient resources to be identified in the IRP" because Idaho Power's wind QF resources are "nearly twice as large as solar and about four times larger than hydroelectric QFs in terms of nameplate capacity." These wind QFs total almost 627 MW. This is a significant quantity of resources that could avoid future resource needs. For example, in Idaho Power's 20-year planning horizon, Idaho Power states it plans to acquire "3,325 MW of solar, 1,800 MW of wind, 1,453 MW of battery storage, 360 MW

Wind Repowering Helps Set the Stage for Energy Transition, Wind Energy Technologies Office (June 2, 2021), https://www.energy.gov/eere/wind/articles/wind-repowering-helps-set-stage-energy-transition.

³⁷ See Idaho Power Response to the Coalition's Data Request 2 (Attachment A).

See Idaho Power Response to the Coalition's Data Request 1, Attachment 1 (Attachment A).

of energy efficiency, 340 MW of peaking hydrogen, 160 MW of incremental demand response, and 30 MW of geothermal."³⁹ These renewing wind QFs could reduce this resource need and avoid the need to acquire a new solar farm, wind farm, or other resource.

What this means is that, because these wind QFs are likely to renew, Idaho Power is overestimating its resource needs and will likely over procure resources. Renewing wind QFs could easily avoid resources Idaho Power plans to build or acquire in the future. This is uneconomic and could be harmful to ratepayers for Idaho Power to acquire resources that are not needed if these wind QFs renew. The better planning approach is to estimate a reasonable percentage of wind QF renewals instead of assuming no wind QFs will renew.

The Commission should not acknowledge the wind QF renewal planning assumption and the forecast of new QFs in this IRP and direct Idaho Power to update these base planning assumptions and update its preferred portfolio. The Coalition recommends a wind QF renewal percentage of 85 percent based on discussions with current wind QF operators.

D. Prior Analysis Has Shown that QFs Provide Significant Capacity Value

QFs also provide significant value to utilities with regards to capacity. For example, PacifiCorp provided a study in response to the Commission's Order in LC 67,

³⁹ 2023 IRP at 1.

which models QF renewals.⁴⁰ The results appear significant.⁴¹ Assuming that all QF contracts continued through the end of the study period, an SCCT that would have been constructed in 2026 was pushed out to 2029, and an additional SCCT replaced some battery storage in 2029.⁴²

This analysis reveals that assuming QF renewals can have a major impact on a utility'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.

E. The Commission Can Acknowledge the Value of Existing QF Capacity in Two Possible Ways in Docket No. UM 2000

In UM 2000, the Commission should acknowledge that QFs provide significant capacity value to the utilities and require the utilities 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. For example, Idaho Power uses its IRP to calculate its avoided cost as "incremental cost IRP" (ICIRP), which is 16.1 to 22 percent lower that its standard avoided cost. ⁴³ In UM 2000, the

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).

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

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).

In re Idaho Power Company's Petition to Establish Avoided Cost Rates
Applicable to PURPA Energy Storage QFs, Idaho Public Utility Commission
("IPUC") Docket No. IPC-E-20-02, Order No. 34794 at 3 (Oct. 2, 2020); IPUC

Commission can direct the utilities to implement two possible solutions to compensate existing QFs for the significant capacity value they provide.

First, the Commission could require that the utilities simply continue paying a QF the capacity payment at the beginning of their renewed contract, i.e., there would be no "sufficiency period" at the beginning of the new contract. This is how the 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.⁴⁴

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."⁴⁵

Second, the Commission could direct the utilities to determine exactly what capacity value the QFs provide, and simply compensate them for that value. The deferral of a resource is of significant value to a utility 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 the utilities' analyses when the rates are actually

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Docket No. IPC-E-20-02, Request for Public Input and Initial Comments of the Commission Staff at 2 (July 16, 2020).

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).

⁴⁵ IPUC Docket Nos. IPC-E-15-01, AVU-E-15-01, PAC-E-15-03, Order No. 33357 at 26.

calculated. This is what the Commission directed in UM 1610, but what has not occurred to date.

III. CONCLUSION

The Commission should not acknowledge the wind QF renewal planning assumption and the forecast of new QFs in this IRP and direct Idaho Power to update these base planning assumptions and update its preferred portfolio. The Coalition recommends a wind QF renewal percentage of 85 percent based on discussions with current wind QF operators.

Dated this 7th day of February 2024.

Respectfully submitted,

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Of Attorneys for Renewable Energy Coalition

Attachment A

Idaho Power Company Data Responses to Coalition

REC'S DATA REQUEST NO. 1:

Please provide a complete list of qualifying facility contracts that have entered into PPA with Idaho Power since 1980 including the following information, and please provide all workpapers in original electronic format:

- a. Project Name
- b. Project County and State
- c. PPA execution date
- d. Resource Type
- e. Nameplate Capacity
- f. Actual Commercial Operation Date
- g. Contracted Commercial Operation Date
- h. Type of PPA (Standard or Non-Standard)
- i. PPA Expiration date
- j. Whether on-system or off-system
- k. Whether the contract is for a new or existing project, and if renewing, then the dates for each contract
- I. If the Project is currently operating under a renewed PPA, the term of the renewal PPA and the time it took to renegotiate the renewed PPA
- m. For QFs that began operating and whose contracts expired, whether the QF entered into a new contract with Idaho Power, and, if not, why not.

<u>IDAHO POWER COMPANY'S RESPONSE TO REC'S DATA REQUEST NO. 1:</u>

Please see the attached Excel spreadsheet for the information requested, as available. The attachment lists the qualifying facility ("QF") projects that currently have executed contracts with Idaho Power or have agreed to contracts that are pending regulatory approval. The provided information also can be found in each QF's contract and is publicly available through the websites of the Idaho Public Utilities Commission ("IPUC") or the Public Utility Commission of Oregon ("OPUC"), as applicable.

Idaho Power notes that REC requested similar information as discovery in docket LC 78, the case for the Company's 2021 Integrated Resource Plan.¹ However, REC's request in LC 78 did not include items (j) or (l) as listed above. As such, the information in this response has been updated to reflect the handful of changes that have occurred since then and includes responses to the new requested items.

Please also note that Idaho Power does not retain a comprehensive record of all Public Utility Regulatory Policies Act of 1978 ("PURPA") contracts that have been entered into since the first QF contract was executed in 1982. For those power purchase agreements ("PPA") that are not currently active, the requested information is provided to the extent it is available.

The Company offers additional response to the following parts of this request:

h. Idaho Power assumes the reference to standard and non-standard contracts refers to Oregon standard and non-standard contracts. Many of the QFs that have PURPA PPAs with Idaho Power are governed by IPUC rules rather than the OPUC. Column 'B' of the attachment contains information as to which type of PURPA PPA each QF has.

¹ LC 78, Idaho Power's Response to REC's Request No. 1

- k. Idaho Power clarifies that PPAs are not "renewed" as referenced therein. Rather, in the event a contract is terminated or expires, an eligible QF may request that a new contract be executed for the same facility in compliance with the applicable PURPA rules and regulations in place at that time. Idaho Power refers to such new agreements as "replacement" contracts. In column 'O' of the attachment, Idaho Power has provided information on QFs that entered into new contracts with Idaho Power upon expiration of the original contracts, as requested in item (k). For those projects that did not result in new contracts, however, Idaho Power has no direct knowledge as to why those QFs did not request a replacement contract. Therefore, Idaho Power has no direct knowledge responsive to item (m).
- I. Idaho Power has not retained data on the time taken to negotiate individual replacement contracts with QFs upon expiration of their prior contracts. In general, under the timelines described in the Company's Idaho Schedule 73 and Oregon Schedule 85, and in Idaho Power's experience, it can take six to nine months to negotiate, execute, and, where required, obtain regulatory approval of a replacement agreement. Regarding terms of renewal PPAs, please see the response to part (k).
- m. See response to part (k).

LC 84 - REC Request No. 1

a.	b.	C.	d.	e.	f.		C Request No. 1	.		k.	I.	m.	n.	О.	
·	Contract Type			Plant	Plant	g. Facility		First Energy	J. Finat	Operational		Contract	Contract Status		p. On-System or
Project Name	(Oregon Standard,	County	State	Size	Size	Type		Date Est	First Energy	Operational Date Est		Termination	Contract Status	ent	Off-System or
	Oregon Non- Standard, Idaho)		Location		(MW)	Туре	Date	Date Est	Date Actual	Date Est		Date		Contract Entered Into?	On-System
Bennett Creek Wind Farm	Idaho	Elmore	ID	21000	21	Wind	12/20/2006	3/31/2007	9/15/2008	12/31/2007	12/15/2008	12/15/2028	Active and Online		On-System
Benson Creek Windfarm	Oregon Standard	Baker	OR	10000	10	Wind	10/9/2013	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-System
Burley Butte Wind Park	Idaho	Cassia	ID	21300	21.3	Wind	5/5/2005	10/30/2005	12/3/2010	9/1/2010	2/1/2011	2/1/2031	Active and Online		On-System
Camp Reed Wind Park	Idaho	Elmore	ID	22500		Wind	7/9/2009		12/21/2010	9/30/2010	12/31/2010	12/31/2030	Active and Online		On-System
Cassia Wind Farm LLC	Idaho	Twin Falls	ID	10500		Wind	4/7/2006	8/31/2006	2/16/2009	12/31/2006	3/24/2009	3/24/2029	Active and Online		On-System
Cold Springs Windfarm	Idaho	Elmore	ID	23000	23	Wind	11/12/2010	12/31/2011	8/11/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-System
Desert Meadow Windfarm	Idaho	Elmore	ID	23000	23	Wind	11/12/2010	12/31/2011	7/27/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-System
Durbin Creek Windfarm	Oregon Standard	Baker	OR	10000	10	Wind	10/9/2013	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-System
Fossil Gulch Wind	Idaho	Twin Falls	ID	10500	10.5	Wind	9/9/2004	12/15/2004	12/31/2004	1/1/2005	9/30/2005	9/30/2025	Active and Online		On-System
Golden Valley Wind Park	Idaho	Cassia	ID	12000	12	Wind	5/5/2005	4/30/2006	11/23/2010	6/1/2006	2/1/2011	2/1/2031	Active and Online		On-System
Hammett Hill Windfarm	Idaho	Elmore	ID	23000	23	Wind	11/12/2010	12/31/2011	8/2/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-System
High Mesa Wind Project	Idaho	Twin Falls/Elmore	ID	40000	40	Wind	11/16/2011	11/1/2012	12/8/2012	12/28/2012	12/27/2012	12/27/2032	Active and Online		On-System
Horseshoe Bend Wind	Idaho	Cascade	MT	9000	9	Wind	1/6/2004	12/31/2004	2/16/2006	12/31/2004	2/28/2006	2/28/2026	Active and Online		Off-System
Hot Springs Wind Farm	Idaho	Elmore	ID	21000	21	Wind	12/20/2006	3/31/2007	9/15/2008	12/31/2007	12/15/2008	12/15/2028	Active and Online		On-System
Jett Creek Windfarm	Oregon Standard	Baker	OR	10000	10	Wind	10/9/2013	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-System
Lime Wind Energy	Oregon Standard	Baker	OR	3000	3	Wind	12/8/2010	10/1/2011	11/19/2011	12/31/2011	12/9/2011	12/9/2031	Active and Online		On-System
Mainline Windfarm	Idaho	Elmore	ID	23000	23	Wind	11/12/2010	12/31/2011	7/4/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-System
Milner Dam Wind	Idaho	Cassia	ID	19920	19.92	Wind	10/14/2005	11/1/2006	12/11/2010	5/1/2007	2/1/2011	2/1/2031	Active and Online		On-System
Oregon Trail Wind Park	Idaho	Twin Falls	ID	13500	13.5	Wind	2/18/2005	12/31/2005	12/23/2010	1/15/2006	1/25/2011	1/25/2031	Active and Online		On-System
Payne's Ferry Wind Park	Idaho	Twin Falls	ID	21000	21	Wind	7/9/2009	9/30/2010	12/21/2010	9/30/2010	12/31/2010	12/31/2030	Active and Online		On-System
Pilgrim Stage Station Wind Park	Idaho	Twin Falls	ID	10500	10.5	Wind	2/18/2005	12/31/2005	12/30/2010	9/1/2010	1/17/2011	1/17/2031	Active and Online		On-System
Prospector Windfarm	Oregon Standard	Baker	OR	10000	10	Wind	10/9/2013	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-System
Rockland Wind Farm	Idaho	Power	ID	80000	80	Wind	9/3/2010	7/15/2011	11/3/2011	12/31/2011	12/9/2011	12/9/2036	Active and Online		On-System
Ryegrass Windfarm	Idaho	Elmore	ID	23000	23	Wind	11/12/2010	12/31/2011	8/10/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-System
Salmon Falls Wind	Idaho	Twin Falls	ID	22000	22	Wind	10/14/2005	11/1/2006	1/4/2011	5/1/2007	4/22/2011	4/22/2031	Active and Online		On-System
Sawtooth Wind Project	Idaho	Elmore	ID	22000	22	Wind	9/1/2009	10/31/2012	10/1/2011	12/31/2012	11/1/2011	11/1/2031	Active and Online		On-System
Thousand Springs Wind Park	Idaho	Twin Falls	ID	12000	12	Wind	2/18/2005	12/31/2005	12/23/2010	1/15/2006	1/17/2011	1/17/2031	Active and Online		On-System
Tuana Gulch Wind Park	Idaho	Twin Falls	ID	10500	10.5	Wind	2/18/2005	12/31/2005	12/23/2010	1/15/2006	1/25/2011	1/25/2031	Active and Online		On-System
Tuana Springs Expansion	Idaho	Twin Falls	ID	35700	35.7	Wind	8/5/2009	11/1/2009	4/10/2010	6/30/2010	5/14/2010	5/14/2030	Active and Online		On-System
Two Ponds Windfarm	Idaho	Elmore	ID	23000	23	Wind	11/12/2010	12/31/2011	7/21/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-System
Willow Spring Windfarm	Oregon Standard	Baker	OR	10000	10	Wind	5/23/2014	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-System
Yahoo Creek Wind Park	Idaho	Twin Falls	ID	21000	21	Wind	7/9/2009	9/30/2010	12/21/2010	9/30/2010	12/31/2010	12/31/2030	Active and Online		On-System

REC'S DATA REQUEST NO. 2:

In Idaho Power's 2023 Integrated Resource Plan ("IRP"), Idaho Power assumes no wind qualifying facilities ("QFs") will renew when their existing contracts expire for the base planning assumptions. The IRP is silent on the renewal percentages for non-wind QFs. In the past two IRPs, Idaho Power has continued to assume 100 percent of non-wind QFs will renew. Does Idaho Power still assume 100 percent of non-wind QFs will renew?

- a. If not, please explain why not.
- b. If so, please explain why Idaho Power only assumes wind QFs will not renew when their existing contracts expire.
- c. If so, please provide any factual documentation or support for the conclusion that 100 percent of non-wind QFs will renew when their existing contracts expire.

IDAHO POWER COMPANY'S RESPONSE TO REC'S DATA REQUEST NO. 2:

Yes, Idaho Power still assumes 100 percent of non-wind qualifying facilities ("QF") will renew.

- a. Not applicable.
- b. Wind QFs are unique among all QFs on Idaho Power's system because of their total aggregate nameplate capacity relative to other resource types. Wind QFs are nearly twice as large as solar and about four times larger than hydroelectric QFs in terms of nameplate capacity. However, many existing wind contracts will expire within the first half of the 20-year period evaluated in the 2023 Integrated Resource Plan ("IRP"). Therefore, the Company's renewal assumptions for wind QFs can potentially alter the quantity and timing of more near-term resource selections in the IRP. Based on these impacts, and the fact that Idaho Power has not received any definitive, actionable indication that wind QFs will enter into new contracts upon expiration of their current contracts, Idaho Power assumes that no wind QFs will renew in the IRP's base planning case.

As stated in the Company's 2023 IRP¹, this approach allows sufficient resources to be identified in the IRP and has no impact on the ability of QFs to decide whether or not to enter into a replacement agreement when their existing agreement expires. If wind QFs enter into replacement agreements, Idaho Power will update its capacity positions in its planning at that time.

c. In Idaho Power's experience, most non-wind resource types have entered into new contracts upon expiration of their existing contracts. This is especially true for hydroelectric resources, which represent the Company's largest number of Public Utility Regulatory Policies Act of 1978 ("PURPA") contracts, and which generally have long expected facility lifespans. Meanwhile, Idaho Power's solar QF contracts do not begin expiring until late 2036. Given the later date at which solar contracts begin to expire, and the smaller relative nameplate capacity represented by solar QFs, the assumption that they renew presents a lower level of risk than a similar assumption for wind QFs.

¹ Idaho Power's 2023 Integrated Resource Plan, p. 128.

REC'S DATA REQUEST NO. 3:

For Idaho Power's 2021 IRP, the Idaho Power accept adopted Staff's recommendation, which the Commission adopted, to require Idaho Power to revisit the wind QF renewal rate "from an empirical basis in the 2023 IRP." (See Docket No. LC 78, Order No. 23¬004 at 5-6 and Appendix A at 36-37 (Jan. 13, 2023)). Please explain how Idaho Power complied with the Commission and Staff's directive in Order No. 23-004 to revisit the wind QF renewal rate based on an empirical analysis.

<u>IDAHO POWER COMPANY'S RESPONSE TO REC'S DATA REQUEST NO. 3:</u>

To satisfy OPUC Staff's Recommendation 22 in LC 78, which was authorized by Order No. 23-004, Idaho Power evaluated 10 years of historical qualifying facility ("QF") development and renewal data. In analyzing this data, Idaho Power found that over the past 10 years, on average, approximately 23 megawatts ("MW") of wind projects have come online each year. However, QF development does not occur on a neat annual average basis. Over the 10-year period, some years had no wind projects come online, while other years had tens or hundreds of MWs come online through multiple projects. Further, no wind QFs have come online since 2018. Therefore, the 23 MW annual average is not representative of the pattern, or lack thereof, in Idaho Power's wind QF development and its relative nameplate capacity.

Additionally, no wind projects on Idaho Power's system have been up for renewal yet. Therefore, Idaho Power does not have empirical evidence on its system to support any assumption of actual wind QF renewals other than zero.

In the absence of empirical renewal data, Idaho Power discussed the issue of QF renewal assumptions with its IRP Advisory Council ("IRPAC") and aligned on the approach to include a 100 percent wind QF renewal scenario in the 2023 IRP. This scenario assumes that 100% of wind QFs will renew and that new QF development will occur at the 10-year historical annual average rate for each resource type.

It is important to note that Idaho Power has had informal discussions with several wind QFs over the past few years. From these discussions, no project has indicated definitive, actionable intent to enter into a replacement Public Utility Regulatory Policies Act of 1978 ("PURPA") contract after its existing contract expires. As a result, the analysis and scenario described above remain the best empirical data Idaho Power has at this time.

REC'S DATA REQUEST NO. 4:

Please provide any factual documentation or support for the conclusion used in the base planning conditions that no wind QFs would renew after contract expiration.

IDAHO POWER COMPANY'S RESPONSE TO REC'S DATA REQUEST NO. 4:

See the Company's responses to Requests Nos. 2 and 3.

REC'S DATA REQUEST NO. 5:

Did Idaho Power contact any wind QFs or conduct any outreach to determine whether wind QFs would renew their contracts after contract expiration? If not, please explain why not.

IDAHO POWER COMPANY'S RESPONSE TO REC'S DATA REQUEST NO. 5:

Yes. Idaho Power spoke with wind qualifying facility ("QF") owners throughout the development of both the 2021 and 2023 Integrated Resource Plans ("IRP"). However, none of the discussions provided definitive, actionable indications or data regarding affirmative intent to enter into a new Public Utility Regulatory Policies Act of 1978 ("PURPA") contract upon expiration of the existing contract. Depending on the developer, the discussions have indicated that either: (1) a particular project does not intend to enter into a replacement PURPA contract, (2) the project is interested in continuing to sell its output to Idaho Power but may be interested in changes to its project or differing contract structures such as non-PURPA contracts, and/or (3) the project does not have definitive plans yet.

REC'S DATA REQUEST NO. 6:

Please provide any communications between Idaho Power and wind QFs related to whether the wind QF would renew their contracts after contract expiration.

IDAHO POWER COMPANY'S RESPONSE TO REC'S DATA REQUEST NO. 6:

Please see the attached letter from Idaho Winds LLC. See also the Company's response to Request No. 5 describing informal, verbal communications that have occurred between Idaho Power and wind qualifying facility ("QF") owners.

Attachment B

Declaration of John R. Lowe

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 84

In the Matter of
IDAHO POWER COMPANY,
2023 Integrated Resource Plan.

DECLARATION OF JOHN R. LOWE

- I, John R. Lowe, declare under the penalty of perjury as follows:
- 1. I am the founder and director of the Renewable Energy Coalition (the "Coalition"). This declaration is based on my personal knowledge and, if called to testify to the following facts, I could and would competently do so. I submit this declaration in support of the Coalition's Opening Comments in the Idaho Power Integrated Resource Program proceeding.
- 2. My name is John R. Lowe. I am the founder and director of the Coalition. My business address is P.O. Box 25576, Portland, Oregon 97298.
- In 1975, I graduated from Oregon State University with a Bachelor of Science degree.
- 4. From 1975 to 2006, I was employed by PacifiCorp. Over most of that 30-year period, my responsibilities were primarily related to PacifiCorp's contracting and policies under the Public Utility Regulatory Policies Act of 1978 ("PURPA") throughout the utility's multi-state service territory, which includes Washington, Oregon, California, Idaho, Wyoming, and Utah. My responsibilities included all contractual matters arising under PURPA and supervision of other matters related to both power purchases and

interconnections. In that capacity, I was involved in scores of contract negotiations, helped develop new contract concepts, terms and language, and became familiar with terminology commonly used in the electric utility industry in utility tariffs and written power purchase agreements ("PPA") for purchases from qualifying facilities ("QF").

- 5. Since 2009, I have been directing and managing the activities of the Coalition as well as providing consulting services to individual members of the Coalition related to both power purchases and interconnections. My interconnection work at the Coalition has been primarily related to small generation projects. Generally, when working with PacifiCorp, we have been able to reach a mutually agreeable resolution of the issues, which often resulted in modifications agreed to by the utility.
- 6. There was a significant amount of PURPA activity during the early 1980s, primarily related to small scale hydroelectric and biomass in PacifiCorp's service territory. After this initial burst of development, there was only modest development in PacifiCorp's service territory and almost none in PGE's service territory. PURPA activity increased following the energy crisis in the early 2000s as well as the Commission's seminal PURPA cases in Docket No. UM 1129 (establishing new PURPA policies) and AR 521 and UM 1401 (establishing interconnection rules and policies). This resulted in a modest level of new projects selling power to PacifiCorp and Idaho Power (as well as the closure of large co-generation and biomass projects due to difficulties in those industries and harmful Commission policies). There remained only a very small amount of new projects selling power to PGE. Thus, PacifiCorp and Idaho Power have had nearly forty years of working with and understanding the power

purchase and interconnection issues associated with PURPA projects, while PGE has had almost none until the last few years.

- 7. I have reached out or been copied on email communications to current wind QF projects selling power to Idaho Power.
- 8. As of the date of filing these comments, I have seen responses from 30 of the 32 wind QF projects.
- 9. Of the 30 wind QF projects, the majority have indicated they intend to enter into contracts with Idaho Power after their current contracts expire while some have not yet made a final decision. I am not aware of any project that is not intending to renew.

 Those 30 projects account for about 94 percent of the Idaho Power wind QF projects.

 These 30 projects represent about 607 MW or 97 percent of the Idaho Power wind QF contract capacity. Here is a list of all the current wind QFs selling power to Idaho Power.

 Power. 1

See also Idaho Power Response to the Coalition Data Request 1, Attachment 1 with (g) filtered for wind projects and (n) filtered for only "Active and Online" projects (Attachment A to the Coalition's Opening Comments).

A	В	C	D	E	F	G	Н	1	J	K	L	M	N	0	P
						IDAHO PO	WER COMPANY	•							
						LC 84 - RE	C Request No. 1								
a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	I.	m.	n.	0.	p.
Project Name	Contract Type (Oregon Standard, Oregon Non- Standard, Idaho)		Physical State Location	Size (kW)	Plant Size (MW)	Facility Type	Contract Date	First Energy Date Est	First Energy Date Actual	_	Date Actual	Contract Termination Date	Contract Status	nt Contract Entered	On-System Off-System
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Bennett Creek Wind Farm	Idaho		ID	21000		Wind	12/20/2006	3/31/2007	9/15/2008	12/31/2007	12/15/2008		Active and Online		On-System
Benson Creek Windfarm	Oregon Standard		OR	10000		Wind	10/9/2013	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-System
Burley Butte Wind Park	Idaho		ID	21300		Wind	5/5/2005	10/30/2005	12/3/2010	9/1/2010	2/1/2011	2/1/2031	Active and Online		On-System
Camp Reed Wind Park	Idaho		ID	22500		Wind	7/9/2009	9/30/2010	12/21/2010	9/30/2010	12/31/2010	12/31/2030	Active and Online		On-Systen
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Desert Meadow Windfarm	Idaho		ID	23000	23	Wind	11/12/2010	12/31/2011	7/27/2012	12/31/2012	12/8/2012	12/8/2032	Active and Online		On-Syster
Durbin Creek Windfarm	Oregon Standard	Baker	OR	10000	10	Wind	10/9/2013	9/1/2016	3/8/2017	12/31/2016	3/23/2017	3/23/2037	Active and Online		On-Syster
Fossil Gulch Wind	Idaho	Twin Falls	ID	10500	10.5	Wind	9/9/2004	12/15/2004	12/31/2004	1/1/2005	9/30/2005	9/30/2025	Active and Online		On-Syster
Golden Valley Wind Park	Idaho	Cassia	ID	12000	12	Wind	5/5/2005	4/30/2006	11/23/2010	6/1/2006	2/1/2011	2/1/2031	Active and Online		On-Syster
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I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence in court and is subject to penalty for perjury.

DATED this 7th day of February 2024.

John R. Lowe