BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

Docket No. UM 2193

In the Matter of PACIFICORP, dba PACIFIC POWER, Application for Approval of 2022 All-Source Request for Proposals.	Staff Comments

The Public Utility Commission of Oregon Staff (Staff) offers these comments on PacifiCorp's (Company) Application for Approval of the 2022 All-Source Request for Proposal (2022AS RFP).

BACKGROUND

On September 2, 2021, PacifiCorp filed an application (Application) to request that the Commission open a docket for its All-Source request for proposal (RFP). The Application contained two related action items: a request for approval of an independent evaluator (IE) to oversee the RFP process, and a request for approval of the bid scoring and associated methodology for the RFP. The Commission approved the IE, PA Consulting, on October 21, 2021. The Commission also subsequently approved PacifiCorp's request for a partial rule waiver for OAR 860-089-0250(2)(a), where it waived the requirement for approval of a proposal for scoring and associated modeling methodology prior to preparing a draft RFP and instead required these elements be considered for approval at the final acknowledgment meeting to be held on April 14, 2022.

PacifiCorp filed a draft RFP on January 14, 2022, which included proposed processes for scoring, ranking, screening, and evaluating bids submitted in response to the RFP.[1] The company described these proposed processes to stakeholders at various informal workshops held on November 15, 2021, and January 7, 2022.

COMMENTS ON DRAFT 2022AS RFP

Based on the information provided by PacifiCorp; regular conversations between, Staff, PacifiCorp, and PA Consulting; and periodic conversations with non-bidding interested parties in Docket No. UM 2193, Staff believes that the draft 2022AS RFP generally includes appropriate objectives, technical elements, and proposed modeling

[1] Docket No. UM 2193, 2022AS RFP.

methodologies, with certain caveats. Below, Staff offers comments on the bid scoring and modeling methodology, as well as other elements of the draft 2022AS RFP.

Remaining Issues from Staff November 22 Comments

Elimination of the Initial Shortlist and Use of Plexos
In general, Staff's views on the bid scoring and modeling methodology design remain the same as presented in Staff's comments submitted on November 22, 2021. In those comments, Staff indicated that the modeling changes were both positive and negative. The main improvements included the simplified process that removed geographical limits or bubbles, as well as the inclusion of transmission and interconnection costs earlier on that would allow for more comparable price ranking. The Company's switch to relying entirely on Plexos for bid scoring would allow for the use of all the same software used in the IRP, with a shift away from the Company's proprietary models. At an initial review, these changes seem to allow for a more straightforward and transparent process and would eliminate the need for pricing updates that include interconnection costs in the 2022AS RFP.

However, the revised process, and parts of its design, are not without shortcomings. First, the revised process eliminates the initial short list step. A main reason for this is that PacifiCorp is requiring bidders to include information on interconnection/ transmission costs as well as an interconnection study in order to bid into the 2022AS RFP. Waiting until the 2022 cluster study is complete would allow new projects not yet studied to receive upgrade cost estimates and the required interconnection study. This would theoretically allow for a more diverse cohort of bids into the 2022AS RFP. Staff believes this to be an improvement as it is a more streamlined approach. However, various stakeholders were unhappy with this method because in the prior RFP, bidders could use their initial shortlist acceptance as an alternative method of demonstrating commercial readiness and secure their project's place in a cluster study. It also would have allowed the Commission to be able to preview certain projects beforehand. Thus, it is viewed by some as an inferior process because it eliminates an avenue for participation.

However, one of the limitations of the former approach was that it did not require interconnection costs at the time of bidding. Instead, initial shortlist resources were not required to include these costs in price updates until after the transition cluster study. This resulted in changes to bid pricing mid-process upon updating project costs. As indicated in initial comments, though there are certain opportunities lost in changing the RFP design, the requirement to include interconnection costs as part of the bid will allow for more comparable price ranking when analyzed by Plexos. From this standpoint, the price scoring and selection process of the RFP is more straightforward and allows for projects to be scored on a more even footing. The IE, in its November 22 comments also noted that the purpose for releasing the RFP prior to the Transmission Cluster Study window was to allow bidders to request to be included in the cluster, obtain cost estimates, and eliminate the need for price updates.

Despite these positives, Staff continues to have lingering concerns with some of the minimum requirements. As this is the first PacifiCorp RFP with benchmark bids under the new competitive bidding rules, Staff had several questions about how benchmark scoring would work. Though the use of Plexos is more streamlined, PacifiCorp has not provided the Commission or the IE with access to the model to be able to replicate price scoring. While it is Staff's understanding that the IE does not have concerns with Plexos itself, the fact remains that stakeholders will mostly only have access to inputs and outputs of the Plexos model and will be unable to verify scores. It was also Staff's impression that the IE generally puts more emphasis on the quality of inputs and assumptions and will be reviewing those accordingly. The IE is required to independently score affiliate bids, bids with ownership options, and all or a sample of the remaining bids.[2] At this point in time, Staff is not certain the IE can conduct independent scoring as proposed in the RFP without using the Plexos model. If the IE cannot conduct an independent score of bids, Staff does not believe the Company would be in compliance with the competitive bidding rules. At this point in time, Staff believes that to achieve compliance, PacifiCorp would be required to give the IE access to the Plexos model in order for there to be a process for independent benchmark scoring.

Staff Recommendation

- A process for compliance with benchmark scoring rules must be developed to ensure compliance.

Requirement for Two Different Benchmark Scores
Based on PacifiCorp's proposed schedule for the RFP, it is not clear to Staff when the Company intends to finalize its benchmark score. The competitive bidding rules indirectly call for two different benchmark score filings—the first occurs when PacifiCorp files a detailed score and cost data for benchmark bids prior to the opening of bidding, and the second filing occurs after the final score is developed "in consultation with the IE" and before the IE provides the company with the opportunity to score other bids.[3] Though PacifiCorp has allowed room in its schedule for IE consultation, it is unclear when the first score will be filed. Below is a graphic from PacifiCorp's draft RFP that lists proposed dates for benchmark scores:

Benchmark bids due	11/21/2022
PacifiCorp completes benchmark bid evaluations	12/14/2022
IE completes review of benchmark bid evaluations	01/13/2023
PacifiCorp files benchmark bid evaluation	01/13/2023

It is unclear whether PacifiCorp intends to assign an initial benchmark score on December 14. If this is the case, this would allow the IE between December 14 and January 13 to confer with PacifiCorp regarding its own scores. Staff notes that this

[2] OAR 860-089-0450(5).
[3] OAR 860-089-0350(3)(a).

timing issue is separate from the requirement for the IE to independently score benchmark bids.

Staff Recommendation

- The Company should clarify how it intends to comply with the timing rules on benchmark scoring in its response comments.

General Bid Scoring
The Company hosted multiple calls with Staff to review bid scoring. The calls revolved around how Plexos would treat all bids, including benchmark bids. Staff had concerns about the way the Company was choosing to apply Plexos to score bids. As a brief summary, there are multiple components to Plexos in evaluating resources—a long-term capacity expansion component that selects a preferred portfolio, and a shorter-term evaluation component that evaluates resources on an hourly basis. It is Staff's understanding that it is in this shorter-term component that all bids will be scored based on their value, the results of which PacifiCorp intends to use as its price score.

Staff's initial concern was whether all market bids would be receiving a score since scoring seemed to be within the context of a particular portfolio. Staff learned that the short-term model would be considering all bids together, and it was in the short-term model that all bids would be assigned scores based on Plexos results. However, when Staff probed further into the timeline of the process, it was still unclear whether PacifiCorp would be complying with the entirety of the rule. The rule on benchmark scoring states:

> (1) Prior to the opening of bidding on an approved RFP, the electric company must file with the Commission and submit to the IE, for review and comment, a detailed score for any benchmark resource with supporting cost information, any transmission arrangements, and *all other information necessary* to score the benchmark resource. The electric company must apply the same assumptions and bid scoring and evaluation criteria to the benchmark bid that are used to score other bids.
> (2) If, during the course of the RFP process, the Commission or the IE determines that it is appropriate to update any bids, the electric company must also make the equivalent update to the score of the benchmark resource.
> (3) Before the IE provides the electric company an opportunity to score other bids, the electric company must file with the Commission and submit via a method that protects
> confidentiality the following information:
> (a) The final benchmark resource score developed in consultation with the IE, and
> (b) Cost information and other related information shared under this rule.

Emphasis Staff's. On a call with the Company, Staff inquired as to the meaningfulness of the benchmark score since the rules dictate that benchmark bids be scored prior to market bid opening. Because of the way PacifiCorp has decided to employ the short-term model in Plexos to evaluate all bids on an hourly basis, Staff's understanding is that accurate benchmark scores would not be possible (or meaningful) since PacifiCorp will not have the market bid characteristics as inputs into Plexos. The Company indicated that to resolve this issue, it would use proxy resources identified in the IRP as "stand-ins" for market bids, and would score benchmark bids against each other, and against those proxy resources. PacifiCorp would subsequently replace those proxy resources with actual market bids upon receiving actual market bids.

Staff believes this process may be sufficient, but not technically compliant with the rules because PacifiCorp will not have access to "all other information necessary" (i.e., market bid inputs) to assign an accurate benchmark score. As Staff understands it, the short-term model would value all resources and then force rank them. As a result, each bid score is relative to what has the most or least value, and the "true" benchmark score will not be assigned until after PacifiCorp receives, and scores, the market bids. The use of proxy resources is a method of accounting for the lack of market bid inputs and may be sufficient in complying with the rule if PacifiCorp provides all assumptions and inputs at the time of benchmark bidding, and these do not change after market bids are submitted to PacifiCorp. Understanding how benchmark bids compare against each other in a controlled environment could also be a useful exercise.

Staff Recommendation

- The Company should clarify its approach in scoring benchmark bids, and how it intends to comply with the requirement to provide all other information in scoring benchmark bids.

Commercial Operation Date (COD)

One of the minimum filing requirements in the RFP is that bids must demonstrate that they can commercially operate by 2026, though there is a two-year extension to 2028 for long-lead projects like pumped storage hydropower or nuclear facilities. Various stakeholders filed comments opposing the COD requirement. Both NIPPC and RNW recommended that the interconnection process timeline be changed and that the COD be extended past December 31, 2026.[4] The primary reasoning behind this is that this RFP could see similar problems as the 2020AS RFP, where projects without large generator interconnection agreements (LGIAs) were disadvantaged during the interconnection study process. NIPPC indicated that projects from Cluster 1 have network upgrades at 60 months or more, which means these projects would not be eligible to participate in the 2022 RFP.[5] In response, PacifiCorp has pointed to the IRP and its identified capacity need by 2026 as a reason why the COD should not be extended. Further, PacifiCorp indicated that contracting for resources with extended CODs sooner rather than later could lock in higher costs and greater uncertainty, as opposed to considering more immediate resources for which costs and development timeframes are more certain.[6]

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[4] NIPPC's and RNW's November 15 comments.
[5] NIPPC's November 15 comments, page 12.
[6] PacifiCorp's November 29 comments, page 13.

Staff has participated in several calls with the Company and other stakeholders to explore this issue. Staff recognizes that PacifiCorp has identified an immediate resource need in 2026 and sympathizes with the argument that committing to projects with a timeframe that is farther out may introduce more risk. However, it does seem to introduce some risk if Staff agrees to include longer-lead time resources an extended time period to 2028. Should the Company end up selecting long-lead (2028) bids that would bring the Company's system the most value, PacifiCorp would need to manage a capacity gap between 2026 to 2028. The fact that the Company is open to this risk by making room for long-lead resources but is not willing to wait the same amount of time for other resources, seems arbitrary to Staff.

On the other hand, Staff has also had extended calls with the Company and the IE attempting to understand more about the COD issue. Staff was made aware that some projects were assigned extended upgrade timelines lasting up to 72 months. In some instances, it appears that certain projects were able to come online sooner than expected. The concern is that a project would be eliminated from consideration because of the assigned COD where an earlier online date is practically feasible. However, Staff also learned that in these types of situations, it is likely that a 72-month upgrade may include such things as a new transmission line (e.g., new conductors, potential substations, and the introduction of siting issues). In this situation, a six-year upgrade is likely to be a generous estimate for how fast the upgrade could be built.

Without more information about the specific requirements for transmission or interconnection upgrades for every single interconnection study, including things like regulatory permits and siting introduces some risk appropriate to introduce into the RFP with respect to COD. This raises the question of how much risk is acceptable. PacifiCorp insists that 2026 remains the appropriate date. But Staff does see a possible middle ground in extending the COD to 2027 while retaining the 2028 date for long-lead resources. This could give more time for upgrades for projects participating in the 2022 cluster study, alleviating some developer concerns about assigned CODs 72-months out, and would give a longer grace period for transmission or interconnection upgrades. This would also allow the Company to only need to deal with possible capacity shortfalls for one year instead of two and mitigates the risk of locking in prices too far ahead, as this is only one year out from 2026.

In phone calls with the Company, Staff had probed the issue of what were to happen if a particular project selected in the RFP experienced delays due to unforeseen circumstances and was unable to come online by 2026. The Company indicated that there were ways the Company could deal with this, mostly by relying on market purchases. Though this would subject the Company to price risks in an increasingly transmission-constrained environment, it would be doable, and would have to be utilized anyway under unforeseen circumstances where selected projects are unable to come online in time. In extending the COD to 2027, the Company could introduce a market price sensitivity in evaluating various bids that measures the risk of delaying COD to 2027, and whether it would be worth it to wait the additional year.

Staff Recommendation:

- Extend the COD for non-long-lead resources to 2027, retaining the 2028 date for long-lead resources.
- Add two conditions of a COD beyond December 31, 2026: 1) these bids must be subject to a market price sensitivity, with low and high market prices, to assess whether the risk of relying on the market for one additional year is worth selecting that project (i.e., delaying would still result in bringing the most value to the system); and 2) be subject to a feasibility assessment that takes into account regulatory permitting risks. PacifiCorp's non-price scoring matrix adds a point where "Critical Issues Analysis has not identified any fatal flaw that would prevent resource from reaching commercial operations by the deadline." This could potentially be changed to a minimum filing requirement (MFR).

Legacy LGIA Concerns
As noted above, a persistent issue throughout the 2020AS RFP was how projects with LGIAs had an advantage over projects that did not. This is expected to remain an issue in the 2022AS RFP. To summarize, certain projects with signed LGIAs were effectively "locked in" as selected projects because of PacifiCorp contractual obligations. These projects with signed LGIAs "crowded out" other projects that could have potentially been selected at a lower cost to customers. As a result, Staff's concern is whether LGIA projects bidding into the 2022AS RFP would truly be competitive.

Another concern Staff has is the issue of more competitive projects that might be willing to pay upgrade costs but have no clear way to do so to be able to compete in the RFP. For example, consider "Project A" that has an LGIA and is subject to specific upgrade costs, but there has been little or no advancement in that project for a number of years because its generation costs are uncompetitive, yet it remains in the queue and participates in the RFP. Contrarily, "Project B" can pay for the upgrades and is both commercially ready and cost effective. Staff is still unclear on the details of what valid mechanisms might exist through which "Project B" would be able to replace "Project A" if it is willing and able to pay for upgrade costs, if Project B is on the final shortlist and Project A is not. Staff believes this issue should be further explored with the Company and stakeholders to be able to arrive at the most robust pool of bidders.

Staff Recommendation

- Explore the mechanisms through which a bidder may be able to pay for upgrade costs to accelerate construction if higher-queued projects do not move forward, and include flexibility for such bids in the final short list.

DC-Coupled Storage
This issue involves the eligibility of direct current (DC) -coupled battery storage projects in the 2022AS RFP. In earlier comments for this docket, both NIPPC and RNW indicated that the RFP should not limit co-located renewable + storage bids to alternating current (AC) -coupled storage resources because DC-coupled projects capture efficiencies that AC-coupled projects do not. The current RFP is poised to forbid

DC-coupled storage resources. PacifiCorp provided a detailed response to NIPPC's statements, listing many reasons why it does not want to allow AC coupled renewable plus storage resources, including that key institutions (ANSI and CAISO) have not officially approved revenue-grade DC meters.[7] Further, PacifiCorp has indicated that its valuation models and pro forma contracts have already been designed in consideration of AC-coupled systems, and that DC-coupled systems would be more complicated to operate due to the volume of meters involved.

Stakeholders argued that DC revenue-grade meters do exist, and are accepted by the CAISO, despite not being officially recognized by the CAISO Business Practice Manual (BPM). Staff reached out to the CAISO to receive clarification on several of these conflicting points. Staff confirmed that though DC revenue-grade meters do exist and can be used by customers to submit metering data to the CAISO, they are not yet part of the BPM, and it is unknown when they will officially be accepted.

Several stakeholders feel very strongly that PacifiCorp is not justified in prohibiting DC-coupled metering because avenues exist for their inclusion. Further, it appears that DC-coupled systems are subject to fewer energy losses than AC-coupled systems, and that DC-coupled systems could potentially allow generators to sell more power into PacifiCorp's system. However, PacifiCorp explained, and Staff confirmed with CAISO, that at this point, DC-coupled systems would be more complicated to design and operate, potentially introducing higher O&M costs. While Staff can agree that there is a risk that the Company would be implementing a more restrictive RFP by limiting certain bidders, it remains unclear to Staff the level of complexity involved in designing a solar + storage DC-coupled battery system, and whether the benefits of such a design exceed operating costs.[8] As a result, for the current RFP, Staff would be supportive of PacifiCorp's requirement to restrict battery storage bids to AC-coupled systems. However, this issue should be revisited in the next RFP in the event DC-coupled metering systems become more widely accepted and available.

State Compliance as Part of Non-Price Scoring

In earlier comments in this docket, Staff asked the Company how it would execute non-price scoring as it relates to compliance across multiple states. In response comments on November 29, the Company provided limited detail, stating that for Oregon, PacifiCorp would require Oregon bidders provide an attestation as required under HB 2021. With respect to other states, PacifiCorp stated it might need to add state-situs resources if required to meet those state compliance obligations.

The mechanics of how this will work are still unclear to Staff. Presumably, the Company will analyze whether bids comply with state requirements at the time it determines other elements of non-price scoring. In this case, the Company's assessment of whether projects follow state compliance should be monitored by Staff and the IE. The Company should be providing a summary of what projects are prohibited from selection due to failure to comply with various state mandates—inability to meet labor requirements of

[7] PacifiCorp's November 29 comments.
[8] Informal estimates of efficiency savings are 3-4 percent based on phone calls with stakeholders.

HB 2021, for example. When it presents final scoring, the Company must explain what, if any, projects were prohibited from selection to the final shortlist due to lack of compliance.

Staff Recommendation

- In response comments, the Company should elaborate further on specific steps it will take in assessing whether projects follow state compliance.
- As part of the final shortlist selection, the Company ought to provide a summary of what projects were ultimately prohibited from selection due to failure to comply with various state mandates, and which state mandates projects failed to meet.

Suggested Sensitivities for Bid Evaluation

In the Staff Report filed on October 14, 2021, Staff had indicated that it expected PacifiCorp to perform a series of sensitivities as it evaluates the value of each bid. Staff continues to support the following sensitivities for the 2022 RFP:

- Report present value revenue requirement (PVRR) resulting from adding a social cost of carbon at a 2.5 percent discount rate applied to emissions from PAC system with and without the Final Short List resources.
- Include a ‘no market sales’ sensitivity.
- Include a tax credit extension sensitivity, with low market prices.

Two of the three above were already implemented in the 2020AS RFP and provided useful analysis in testing the economic resiliency of various resources. Staff expects to work with the Company and IE in refining these sensitivities as the RFP progresses.

One last analytical component that must be included in the evaluation of RFP bids is an assessment of the cost of all transmission additions with or without the assumption that PacifiCorp is required to place transmission costs in state-jurisdictional rate base in order to facilitate requests for service from transmission customers. This is inspired by Staff’s experience in the 2020AS RFP and the 2021 IRP, whereby certain transmission costs were “discounted” because of assumptions about PacifiCorp transmission build obligations. Gateway South, for example, received a $1.4 billion cost offset because of the assumed need to construct new transmission to facilitate a Transmission Service Request. Staff has opined on this issue in previous comments and Staff Reports and will not repeat the concerns here. However, it is imperative for the Commission to receive full transparency as to what is at stake in investing in various portfolios. Regardless of the way PacifiCorp has designed its production cost modeling, there must be a full account of costs. As a result, any “discounts,” cost offsets, or omitted transmission buildout costs must be presented for consideration alongside PacifiCorp’s presentation of its final short list to the Commission for acknowledgment.

Staff Recommendations for RFP Sensitivities:

- Report present value revenue requirement (PVRR) resulting from adding a social cost of carbon at a 2.5 percent discount rate applied to emissions from PAC system with and without the Final Short List resources.
- Include a 'no market sales' sensitivity
- Include a tax credit extension sensitivity, with low market prices.
- Provide the cost of all transmission additions with/without ratepayer support of the underlying transmission.

Transmission Rights

Stakeholders filed comments earlier in this docket suggesting that PacifiCorp ought to allow conditional firm transmission service as part of each bid, and to clarify how such products would impact a bid's score. For context, in PGE's most recent RFP, PGE allowed bids to utilize Long-Term Conditional Firm transmission rights in place of Long-Term Firm transmission rights.[9] However, the less firm the transmission product, the lower score the bid received. In its response comments filed on November 29, 2021, PacifiCorp indicated that the Commission should reject this recommendation because transmission is most needed when the system is constrained, and a conditional firm product would create more risk to PacifiCorp's customers.

PGE mitigated the reliability risks of allowing bidders to use Long-Term Conditional Firm transmission by reducing the modeled capacity contribution of these resources. Specifically, Conditional Firm Bridge transmission rights were required to be modeled as being curtailed for the maximum number of hours allowable under contract, with 50 percent of those hours taking place at the time of PGE's greatest need.[10] For the portion of a resource utilizing Conditional Firm Reassessment service, PGE assigned zero capacity value, citing uncertainty about how these contracts will be utilized by BPA.[11]

Staff is open to alternative transmission rights configurations. Staff would support a similar configuration as PGE, where a certain limited percentage of Long-Term Conditional Firm rights could be accepted but scored lower. Ultimately, flexibility must be appropriately balanced with reliability risk. PacifiCorp, as a load serving entity must prioritize reliable service for its customers and accommodating flexibility should not subject the system to adverse reliability impacts. The Pacific Northwest has yet to see the impacts of anticipated coal retirements and additional GW of renewables coming online, and the effect this will have on power flows, curtailments, reliability, and costs. While coal plant retirements will free up additional MW of transmission capacity, replacement of that capacity with intermittent renewables may require transmission availability beyond what exists in the current paradigm, and this does not take into consideration the need for new transmission buildout to get to more diverse resources, which comes with long-lead times and is subject to considerable regulatory oversight and public involvement.

[9] Portland General Electric. Docket No. UM 2166. Draft 2021 AS RFP. Appendix N. Pages 6-7.
[10] Order No. 21-320. Page 23.
[11] Portland General Electric. Docket No. UM 2166. Draft 2021 AS RFP. Appendix N. Pages 11-12.

Price/Non-Price Scoring Ratio
NIPPC had indicated that PacifiCorp should be required to use a price/non-price score ratio of 80/20 instead of 75/25, and PacifiCorp disagreed, stating that the Commission should reject NIPPC's 80/20 ratio recommendation and that 75/25 was an appropriate balance. Placing too much emphasis on price could ignore other risks of non-price challenges related to project viability. However, given the Commission's recent decisions in the PGE RFP (UM 2166), Staff would be open to considering an 80/20 ratio for price/non-price scoring. While Staff believes 75/25 to be a reasonable balance, Staff points to Commission precedent in other dockets.

CONCLUSION

Staff appreciates the opportunity to comment on PacifiCorp's draft 2022AS RFP and looks forward to feedback from the Company and other parties. While Staff believes the majority of the RFP to be well-designed, there remain lingering issues that Staff looks forward to resolving. Below is a reiteration of Staff's recommendations.

- A process for compliance with benchmark scoring rules must be developed to ensure compliance.
- The Company should clarify how it intends to comply with the timing rules on benchmark scoring in its response comments.
- The Company should clarify its approach in scoring benchmark bids, and how it intends to comply with the requirement to provide all other information in scoring benchmark bids.
- Extend the COD for non-long-lead resources to 2027, retaining the 2028 date for long-lead resources.
- Add two conditions of a COD beyond December 31, 2026: 1) these bids must be subject to a market price sensitivity, with low and high market prices, to assess whether the risk of relying on the market for one additional year is worth selecting that project (i.e., delaying would still result in bringing the most value to the system); and 2) be subject to a feasibility assessment that takes into account regulatory permitting risks. PacifiCorp's non-price scoring matrix adds a point where "Critical Issues Analysis has not identified any fatal flaw that would prevent resource from reaching commercial operations by the deadline." This could potentially be changed to a minimum filing requirement (MFR).
- Explore the mechanisms through which a bidder may be able to pay for upgrade costs to accelerate construction if higher-queued projects do not move forward and include flexibility for such bids in the final short list.
- In response comments, the Company should elaborate further on specific steps it will take in assessing whether projects follow state compliance.
- As part of the final shortlist selection, the Company ought to provide a summary of what projects were ultimately prohibited from selection due to failure to comply with various state mandates, and which state mandates projects failed to meet.
- Report present value revenue requirement (PVRR) resulting from adding a social cost of carbon at a 2.5 percent discount rate applied to emissions from PAC system with and without the Final Short List resources.

- Include a ‘no market sales’ sensitivity.
- Include a tax credit extension sensitivity, with low market prices.
- Provide the cost of all transmission additions with/without ratepayer support of the underlying transmission.

This concludes Staff's comments.

Dated at Salem, Oregon, this 18th day of February 2022.

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