

PacifiCorp 2022 All-Source Request for Proposals (2022AS RFP)

Sensitivities and Reporting

Public Utility Commission of Oregon Special Public Meeting
UM 2193 PacifiCorp RFP
November 15, 2022



Agenda

➤ Background

➤ 2022AS RFP: Plexos Input Updates

➤ Sensitivities

Introduction

- 1) No Market Sales
- 2) Offshore Wind
- 3) Natrium
- 4) Gateway South
- 5) No Transmission Cost Offset (Boardman-to-Hemingway (“B2H”))
- 6) Coal Minimum Take (Jim Bridger, Huntington)

➤ Reporting

- 1) Social Cost of Carbon Reporting
- 2) State mandates: Summary of bids which are screened out due to failure to meet mandates
- 3) State mandates: Summary of bid compliance
- 4) Summary of accounting for transmission resources
- 5) Summary of ownership diversity and risk
- 6) Report of coal dispatch
- 7) Report on market sales

Background

Under OAR 860-089-0400(5)(b), the electric company must conduct, and consider the results in selecting a final short list, a sensitivity analysis of its bid rankings that demonstrates the degree to which the rankings are sensitive to: (A) Changes in non-price scores; and (B) Changes in assumptions used to compare bids or portfolios of bids, such as assumptions used to extend shorter bids for comparison with longer bids, or assumptions used to compare smaller bids or portfolios with larger ones.

In both the 2021 Integrated Resource Plan (IRP) Docket No. LC 77 and 2022 AS RFP Docket No. UM 2193, the Commission provided guidance on sensitivity analyses to be performed on the FSL in PacifiCorp's RFP proceeding.

Per OAR 860-089-0500(3), requests for acknowledgement must, at minimum, include the independent evaluator's (IE's) closing report, the electric company's final shortlist, all sensitivity analyses performed, and a discussion of the consistency between the final shortlist and the electric company's last-acknowledged IRP Action Plan.

Order 22-130 of UM2193 requires PacifiCorp to file the sensitivities, additional data, and all workpapers at least two weeks before the IE Closing Report on the final shortlist.

2022AS RFP: Plexos Input Updates

- Updates to be finalized by December 8, 2022, prior to opening benchmark bids.
- Generally consistent with the 2023 IRP, as discussed in public input meetings.
- What is being updated:
 - Market prices and greenhouse gas price forecasts, plus inflation, discount rate.
 - All inputs reflect recent legislation: 2022 Inflation Reduction Act, plus state requirements, e.g. Washington Cap and Invest greenhouse gas compliance.
 - Load Forecast: economic drivers, new load requests, and now includes medium climate change impacts. Also: private generation, efficiency, demand response.
 - Hydro Forecast: Now includes medium climate change impacts.
 - Existing Coal and Gas: operating characteristics, endogenous retirement and upgrade/conversion options, plus environmental compliance: regional haze and other operating limits, and Ozone Transport Rule.
 - Existing Contracts: recent signed contracts, including final 2020AS RFP contracts, plus changes to existing contracts (online dates, terminations, etc.).
 - Transmission Topology: existing rights and options based on pending requests (Serial, Transition, Cluster 1, Cluster 2), plus other future options.
 - Proxy resource costs and cost escalation rates.
- What is not being updated:
 - Wind and solar hourly shape methodology.
 - Regulation reserve requirements methodology.

2022AS RFP Sensitivities: Introduction

Sensitivity cases are primarily intended to identify whether differences in modeling assumptions might result in a different final shortlist of bids, so that the costs and impacts of any changes in the final shortlist can be assessed.

Some sensitivity cases are less directly tied to bid valuation, but such cases could also be informative to the final shortlist.

Reference Case Assumptions:

1. All base case assumptions and inputs are applied, as valid, for final shortlist (FSL) determination and price scoring in the following sensitivities, except for the alternative assumptions specified in the descriptions below.
→ Including projected rate of QF renewals.
2. All transmission resources to be selected endogenously.

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- No Market Sales
 - May identify bids that whose value is reliant upon Market Sales, and forecasted market prices
- Offshore Wind Counterfactual
 - May identify bids that either complement offshore wind (more value when offshore wind is part of the portfolio) or represent an alternative to offshore wind (more value when offshore wind is not part of the portfolio).
- Natrium Counterfactual/Delay
 - May identify bids that either complement Natrium (more value when Natrium is part of the portfolio) or represent an alternative to Natrium (more value when Natrium is not part of the portfolio).
 - Flexible or dispatchable resources are likely to be particularly valuable with uncertainty in resource availability.

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- Gateway South Counterfactual
 - Bids whose interconnection is dependent on Gateway South will be excluded and alternative resources would be required in its absence.
- No Transmission Cost Offset
 - This is not an additional model run - and won't identify changes in bid valuation.
- Coal Minimum Take
 - With no minimum coal take, additional bid selections will always have the opportunity to provide benefits in the form of further reductions in coal costs. The Company's reference assumptions (base case), already assume no coal minimums beyond the next couple years, when bids are unlikely to have commenced deliveries.

2022AS RFP
Reporting → See Appendix A

Backup

Proposed 2022AS RFP Schedule

Milestone	Date
Last day for RFP questions to IEs for Q&A	11/01/2022
Cluster study results posted to OASIS / bidders notified by PacifiCorp Transmission	11/12/2022
Notice of Intent to Bid due	11/17/2022
<u>PLEXOS ASSUMPTIONS LOCKED DOWN</u>	<u>12/08/2022</u>
<u>Benchmark bids due</u>	<u>12/09/2022</u> 11/21/2022
<u>Notice of Intent to Bid due</u>	<u>12/16/2022</u>
PacifiCorp completes non-price scoring, bid preparation models and initial price scoring of benchmark resources in accordance with OAR 860-089-0350 (1)	01/12/2023
<u>Last day for RFP questions to IEs for Q&A</u>	<u>01/13/2023</u>
IEs complete review of benchmark bid evaluations, including non-price scores, bid preparation models, and indicative pricing in comparison with proxy resources	02/13/2023
PacifiCorp files benchmark bid evaluation in accordance with OAR 860-089-0350 (1)	02/13/2023
<u>RFP bids due from market</u>	<u>02/14/2023</u>
Capacity factor and BESS evaluation of bids started	02/16/2023
PacifiCorp completes bid eligibility screening	03/16/2023
IE completes review of bid eligibility screening	03/23/2023
PacifiCorp completes due diligence and non-price scoring of market bids	04/13/2023
IEs complete review of non-price scoring	04/27/2023
Capacity factor and BESS evaluation of bids completed	04/27/2023
PacifiCorp completes bid preparation models for supply-side and demand-side market bids and provides all inputs to portfolio optimization team for upload into PLEXOS alongside benchmark resources files previously provided and uploaded	04/27/2023
PLEXOS generates price score and preferred portfolio for each benchmark and market bid in consideration of all bids	06/26/2023
<u>Final Shortlist (FSL) selected</u>	<u>06/26/2023</u>
IEs' review of FSL completed	07/17/2023
<u>Complete negotiation of T&Cs for resource agreements</u>	<u>11/10/2023</u>
<u>Execute agreements</u>	<u>11/21/2023</u>
Bid validity date	11/21/2023
Winning bid guaranteed COD	12/31/2027

2022AS RFP: Evaluation and Selection Process Steps

1. PacifiCorp Transmission posts interconnection cluster study results
2. Benchmark bid deadline for PacifiCorp.
3. Evaluation and scoring of benchmark bids with IE review.
4. Deadline for Market bids: PPA, BTA, tolling, and professional service agreements.
5. Eligibility determination: conformance to minimum requirements in RFP.
6. Input review:
 - 6a. Third-party engineer review of resource production and energy storage estimates.
 - 6b. Bid preparation excel file: prepares modeling inputs for PLEXOS and aligns bidder production estimates with modeled renewable output and load.
 - 6c. Due diligence to determine non-price score (up to 25 points).
7. Portfolio Modeling: PLEXOS selects portfolio of resources and provides price score inputs (up to 75 points), which are combined with non-price scores (up to 25 points).
8. Compare bid ranking (up to 100 total points) to PLEXOS preferred resources and run additional PLEXOS iterations as needed to determine the final shortlist.
9. State compliance analysis.
10. Final shortlist notification by PacifiCorp.

2022AS RFP: Evaluation and Selection Process Chart

