UM 2000 Broad Investigation of PURPA

Phase 1 Proposal

This announcement describes the next phase that Oregon Public Utility Commission Staff will use for the UM 2000 investigation into modernizing PURPA implementation and QF planning assumptions.

Staff has created a Draft Proposal for calculating avoided cost prices that builds on previous dockets, namely Staff's capacity valuation best practices and the Commission's interim solar + storage rate, and has proactively addressed priority issues related to the changing energy system, market dynamics, and policy landscape. Staff's goals in developing the proposal include:

- Sending more precise signals about what provides value to the utility system and its users, which includes:
    - Reflecting the importance of reliability under a changing system
    - Recognizing the transmission expansion required to acquire the resources identified in the utilities' resource strategies
- Aligning with changing resource procurement drivers and approaches, which includes:
    - Providing more realistic avoided resource characteristics
    - Recognizing the shift to more frequent and nimble, all source procurements
    - Reflecting the ability of small QFs to contribute to PGE and PAC's small-scale resource (SSR) requirements
    - Recognizing that RPS compliance is not likely to drive procurement for PGE and PAC
- Balancing precision and simplicity to increase transparency and confidence in avoided cost rates
- Balancing the above with the customer indifference standard and the affordability challenges facing customers

Staff will conduct an initial workshop to discuss Staff's Straw Proposal and additional issues raised by stakeholders.

After Staff and stakeholders have had the opportunity to collaborate on a Straw Proposal and an Issues List, the Administrative Hearings Division will schedule a prehearing conference to establish a procedural schedule for a contested case, Phase 2. A contested case will allow Staff and parties to address issues related to avoided cost calculation in a manner that provides the opportunity for discovery and the presentation of facts related to technical data.

Staff Straw Proposal

Staff presents its initial straw proposal to support finalization of a scope of issues, as well as to help Staff identify refinements and any areas of consensus that can be reached prior to the contested case phase of the investigation. Staff's full proposal is described in Table 1 below. The key paradigm changes reflected in the proposal include:

A. **Standard price streams:** Staff proposes to eliminate the distinction between renewable and non-renewable rates in recognition that purchases from QFs are avoiding non-emitting resource procurement moving forward. Staff also proposes to introduce a hybrid resource class based on the characteristics of a solar + storage resource. To maintain flexibility, Staff proposes that utilities develop additional resource classes upon request if there is a 5% or greater difference in capacity contribution due to features such as configuration or geography.
    i. Due to the scale of ongoing non-emitting resource procurement and Staff's proposed modifications to the capacity valuation methods, Staff believes that the risks of stale pricing through the use of standard avoided cost rates are less relevant. Staff proposes that all resource classes be eligible for standard pricing up to 10 MW.
    ii. Staff believes that HB 2021 utilities should be working to better capture small-scale resources in their IRPs. If there is a realistic QF proxy modeled in the IRP for a given QF resource class, that can be used for the assumptions about the purchasing QF's characteristics (QF Proxy). Further, the utility should use independent and open-source data to develop the QF proxy characteristic assumptions. Staff proposes the NREL Annual Technology Baseline (ATB) for use in initial implementation.

B. **Capacity valuation:** Staff proposes the following provisions to reflect the capacity contribution of a QF in a changing system:
    i. Capturing the capacity contribution over the life of the resource by moving away from a snapshot ELCC.
    ii. Replacing the sufficiency/deficiency demarcation with a fixed ramp-in to reflect the expected ongoing procurement of non-emitting resources, while acknowledging that the driver of the procurement is not an energy or capacity shortage.
    iii. Moving toward a more realistic capacity resource, that is non-emitting and deliverable to Oregon customers.
    iv. Aligning compensation with the role the resource is expected to play in the utility's reliable, decarbonized resource portfolio by using a last-in ELCC tuned to a realistic and reliable system.
    v. Sending signals to incent hybrid resource dispatch when it's most useful through a pay as you go premium peak approach.

C. **Energy valuation:** Sufficiency/Deficiency: Again, recognizing the scale of ongoing non-emitting resource procurement, Staff proposes to eliminate the sufficiency and deficiency period mechanism in energy valuation. Staff also proposes to derive avoided energy resource assumptions from actual utility procurements if available. If procurement data is unavailable, the utility should use independent and open-source data to develop the QF proxy characteristic assumptions. Staff proposes the NREL

Annual Technology Baseline (ATB) for use in initial implementation.

D. **Policy compliance values:** While Staff does not believe that RPS is driving resource need and acquisition, Staff does believe that QFs have the potential to provide additional value in a post-HB 2021 environment, namely the potential to avoid deliverability constraints and SSR compliance requirements.
   i. Avoided Deliverability Issues: In order to better approximate the value of avoided transmission and distribution costs, cost assumptions for the avoided resource must reflect the avoided resource's proportional share of transmission build out estimated in the IRP preferred portfolio.
   ii. Small Scale Resources (SSRs): Staff recognizes that PURPA is a meaningful tool to meet the state's SSR requirement, and proposes to reflect this value through a SSR compliance adder for <20 MW projects that attest to attaining SSR eligibility. Staff does not believe that there is enough data to develop a realistic, fully conceived SSR avoided resource for use in setting avoided cost rates. Therefore, Staff proposes to capture this value through a simple adder. This adder will only apply to HB 2021 utilities.
   iii. Renewable Portfolio Standard (RPS) : For resources generating Renewable Energy Credits (RECs) under the RPS, Staff proposes to allow the QF to negotiate its own price for REC sale to the utility.

E. **QF Forecasting Practices:** For the purpose of increasing portfolio modelling accuracy and for use in other PURPA capacity contribution evaluations, Staff seeks to establish a consistent methodology for forecasting QF renewal and success rates. Staff proposes that utilities model QF renewal rates in their IRP to equal the 10-year historical renewal rate of QF projects at the time of IRP filing, assuming that QFs will continue indefinitely upon reaching their current expiration date at a size equal to the historical renewal rate. For example, should 75 percent of QF projects historically renew on a utility's system, then each QF will be assumed to operate at 75 percent of its current size upon reaching its current expiration date.[1] Should 10-years' worth of historical data not be available at the time of IRP filing, the utility must calculate reliant IRP inputs using the assumption of a 75 percent QF renewal rate and QF project success rate.

[1] Requirement reproduced from LC 82 – PacifiCorp's 2023 Integrated Resource Plan, Appendix B, page 39.

Table 1. Staff Proposal for PURPA Standard Avoided Cost Methodology and Process

Issue	Existing Practice	Proposed Methodology
A. Standard price streams		
A.1 Price Streams	Price streams: • Renewable rate • Non-renewable rate • Capacity differentiated by resource class e.g., Wind, Solar, Baseload • Interim solar plus storage rate	Price streams will include: • Hybrid (renewable + storage) • Solar • Wind • Baseload • Anything else that results in a 5% difference in capacity contribution at the request of Staff or a stakeholder e.g., tracking v fixed solar
A.2 Size Eligibility	Standard pricing available up to 3 MW for solar, up to 10 MW for all other resources	Standard pricing available up to 10 MW for all resources.
A.3 Standard Pricing Term	20 years/15 years fixed	No change
B. Capacity valuation		
B.1 Capacity Contribution Methodology	New QF • Capacity contribution from IRP • Snapshot year Renewing QF: • Currently, treated as a new QF resource	New QF • ELCC ○ For hybrid: ELCC calculated in premium peak hours only • Capturing change over time, modelled in years 1, 5, 10, 15. • Last in • Portfolio tuned to reliability metric Renewing QF: • No ramp-in • Renewing QF removed from portfolio when calculating capacity contribution • Otherwise treated as a new QF
B.2 Avoided Capacity Resource	• Non-Renewable: ○ Capacity: SCCT	• Capacity: The marginal non-emitting capacity resource acquired (contract execution) for a minimum of five years of service since IRP acknowledgement.

	• Renewable: The next avoidable renewable resource identified in the electric company's IRP for renewable avoided cost prices (wind), plus integration costs.	○ If there has not been a non-emitting resource procurement, use the lowest $/MW-yr renewable resource modeled in IRP that the utility is capable of acquiring and delivering to Oregon customers. ○ Recommendation for initial implementation: Battery – duration and other characteristics are utility specific
B.3 Sufficiency/ Deficiency	• Non-renewable: Based on year of major resources procurement identified in acknowledged IRP • Renewable: Based on year of resources procured for RPS compliance	• Fixed QF ramp-in approved by Commission order – to reflect current tension between capacity deficit and capacity acquisition • Recommendation for initial implementation: 3 year ramp-in for HB 2021 obligated utilities, 5 years otherwise.
B.4 Payment Structure	Capacity payment baked into the levelized $/MWh on peak energy price, based on capacity contribution in NERC HLH hours.	• Solar, wind, baseload: capacity payment baked into the levelized $/MWh on peak energy price, based on capacity contribution in NERC HLH hours. • Hybrid: separate $/MWh volumetric payment for capacity provided during premium peak hours, paid in addition to energy price.
B.5 Source for Purchasing QF Characteristic Assumptions	Use IRP supply side resource data to develop purchasing QF characteristic assumptions	• Use SSR data from the utility's IRP for purchasing QF characteristic assumptions. • Otherwise, use an independent public data source for QF characteristic assumptions ○ Recommendation for initial implementation: NREL Annual Technology Baseline (ATB) • Hybrid resource: Battery configuration should have a one-to-one capacity ratio to the generating solar resource and be of four hour duration.
C. Energy valuation		

C.1 Avoided Energy Resource	• Non-Renewable:
	  ○ Energy: CCCT minus SCCT
	• Renewable: The next avoidable renewable resource identified in the electric company's IRP for renewable avoided cost prices (wind), plus integration costs.
		• The marginal renewable resource acquired (contract execution) for a minimum of five years of service since IRP acknowledgement.
		  ○ If there has not been a renewable resource procurement since IRP acknowledgement, use the lowest $/MWh renewable resource modeled in IRP that the utility is capable of acquiring and delivering to Oregon customers, including integration costs.
		  ○ Recommendation for initial implementation: Wind – location and other characteristics are utility specific

C.2 Sufficiency/ Deficiency	• Sufficiency: Forward market prices (NERC HLH/LLH) • Deficiency: Avoided resource energy value	Avoided resource energy value (for entire fixed term)
D. Policy compliance values		
D.1 RPS	RECs are remitted to the utility.	No standard pricing for REC sales, QF can separately negotiate price for REC sale to utility
D.2 SSR	N/A	• Simple SSR compliance adder for <20 MW projects that attest to attaining SSR eligibility. • Only applicable to HB 2021 Utilities
D.3 Deliverability	IRP proxy supply side resource transmission and interconnection cost assumption e.g., BPA point to point transmission rate	Cost assumptions for the avoided resource must reflect the avoided resource's proportional share of transmission build out estimated in the IRP preferred portfolio.
E. Other system values		
E.1 Ancillary Services	No value	No change

E.2 Other RVOS Values	No values	No change
F. QF forecasting practices - for use in IRP and other PURPA capacity contribution methods		
F.1 QF Renewal Rates	No policy	QF renewal rates to be modelled in the IRP to equal the 10-year historical renewal rate of QF projects at the time of IRP filing, assuming that QFs will continue upon reaching their current expiration date at a size equal to the historical renewal rate. Should 10 years of data not be available, use a renewal rate assumption of 75 percent.
F.2 QF Success Rates	No policy	Use the 10-year historical QF project success rate at the time of IRP filing. Should 10 years of data not be available, use a success rate assumption of 75 percent.