

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD



TO: Commissioners McRae, Barofsky, Schlossberg, Brown, and Carlson

FROM: Brian Booth, Chief Energy Resources Officer; Jonathan Hart, Power Planning

Supervisor; Emily Tozier, Senior Energy Resource Analyst

DATE: September 3, 2024

SUBJECT: 2025 EWEB Avoided Cost Prices Update

OBJECTIVE: Board Action – Approval of Resolution No. 2413

Issue

EWEB is required by state and federal law to calculate and publish its "Avoided Costs" for purchasing electric energy. EWEB's current Avoided Cost schedule, which was calculated in 2022, is attached hereto as Attachment A. Attached hereto as Attachment B is a proposed updated schedule of Avoided Costs as calculated by Staff to reflect changing power market conditions, changing wholesale power supply needs, new capacity compliance obligations, increasing environmental obligations and concerns, and other relevant factors. Staff is recommending that the Board approve the attached update to EWEB's Avoided Cost calculation, to be filed with the Oregon Public Utility Commission ("OPUC") and effective as of January 1, 2025.

Background

The Federal Public Utility Regulatory Policy Act ("PURPA") requires that electric utilities, including EWEB, buy power from QFs at prices based on the purchasing utility's Avoided Cost. PURPA was passed in 1978 in response to energy shortages that occurred during that decade. Under PURPA, "QFs" are defined as renewable and cogeneration¹ projects that are under 80 MW in capacity and that meet certain fuel type, efficiency, and certification criteria. PURPA describes the purchasing utility's Avoided Costs as the price at which the utility would acquire the next increment of electric power but for the QF purchase. In other words, the expected cost of the next power resource that is "avoided" by its purchase of the QF output. Under PURPA, Avoided Costs should be calculated to hold the purchasing utility's retail customers harmless. That is, the retail customers should not be required to pay more for a QF resource than for the hypothetical next non-QF resource.

Although PURPA is a federal statute, many of the details are established and implemented by state law. EWEB is generally considered a "non-regulated utility" under Oregon law, meaning that its retail electric rates and most of its other business activities are not regulated by the OPUC.² In this case, however, non-regulated utilities are required by OAR 860-029-0080(2) to file with the OPUC a non-binding, 20-year schedule of their Avoided Costs.

1 Also sometimes referred to as combined heat and power projects, cogeneration is more efficient, and yields more useful energy output from a given amount of natural gas or coal.

² An entity providing retail electric utility service to Oregon customers that is a people's utility district organized under ORS Chapter 261, a municipal utility operating under ORS Chapter 225, or an electric cooperative organized under ORS Chapter 62.

By January 1 of each odd-numbered year, each nonregulated utility must prepare and file with the Commission a schedule of avoided costs equaling the nonregulated utility's forecasted incremental cost of resources over at least the next 20 years.

The OPUC does not review or approve the Avoided Costs filed by non-regulated utilities, but accepts the filings and makes the Avoided Costs available to the public. EWEB last filed its schedule of Avoided Costs with the OPUC on or about December 21, 2022, having an effective date of January 1st of 2023. In recent years, no QF has asked EWEB to purchase the output of its facility.

The Board should be aware that the OPUC has numerous other PURPA regulations and policy requirements that apply only to regulated utilities and that do not apply to EWEB. Specifically, regulated utilities are required to offer small QFs standard rates and standard contract terms. This means that any eligible small QF can automatically sell its output to the regulated utility according to the prices, terms, and other conditions preapproved by the OPUC. Regulated utilities are also obligated to offer small QFs a 20-year overall standard contract term, with fixed pricing for 15 of those contract years. The OPUC has established the eligibility threshold for standard contracts at 10 MW, and the eligibility threshold for standard rates at 3 MW for solar facilities and 10 MW for all other resource types. Again, as a non-regulated utility, EWEB is not required by the OPUC to offer standard rates or contract terms to QFs of any size.

Discussion

A. Calculation of 2025 Avoided Costs

For any utility, its Avoided Cost is not a specific numeric outcome, but an analytical approach to evaluate and quantify the cost of a hypothetical resource procurement action not taken. The Avoided Cost analysis is therefore highly context sensitive, meaning that the methods of calculation and resultant output are a function of a variety of assumptions that can and will change over time. For example, over the last decade, EWEB's generation resource portfolio has been surplus relative to EWEB's energy retail need. As such, EWEB's Avoided Costs were based on forecasted spot market energy prices, as it was assumed that any incremental generation would result in an incremental spot market sale. Since 2023, however, there have been several changes to EWEB's resource portfolio, regional energy policy, and energy markets, which together have caused Staff to reevaluate EWEB's Avoided Cost methodology.

For this 2025 Avoided Cost update, Staff considered the following factors:

- <u>Capacity Contribution</u>: EWEB Staff is currently working to implement the Western Power Pool's, Western Resource Adequacy Program ("WRAP") at EWEB. Participation in the WRAP creates new portfolio requirements for capacity ownership. Under this program, capacity contribution is a function of resource type (wind, solar, thermal, etc.). EWEB's 2025 Avoided Cost schedule therefore seeks to reflect the different capacity contributions of different resource types by establishing separate Avoided Cost prices for baseload, wind, and solar resources.
- Energy Production Shape: Western energy markets have been heavily influenced by large increases in
 intermittent renewable generation facilities. The value of such intermittent renewable energy can shift
 dramatically based on the time of day, weather conditions, and season. As such, EWEB's proposed 2025
 Avoided Cost schedule has been further adjusted to reflect the correlation between energy prices and
 the shape and value of resource generation by fuel type.

- <u>Energy Market Prices</u>: Over the last couple of years, forward energy markets³ have exhibited price levels and volatility exceeding observed historical norms. Given the real impact of these forward energy markets on EWEB's financial performance, EWEB's proposed 2025 Avoided Cost schedule now includes a blend of actual forward market prices and forecasted market prices.
- <u>Environmental Attributes</u>: Various regional policies have been implemented in recent years and consumer demand have strengthened the current value of non-greenhouse gas emitting resources. EWEB's proposed 2025 Avoided Cost schedule now include an adjustment for new generation resources that can provide a non-emitting (renewable) benefit.
- <u>Transmission</u>: EWEB's proposed 2025 Avoided Cost schedule has been adjusted to reflect potential transmission costs savings associated with generation that is directly interconnected with EWEB's electric system.
- <u>Distribution Savings</u>: EWEB's proposed 2025 Avoided Cost schedule does <u>not</u> reflect potential distribution cost savings. Calculating avoided distribution costs would require detailed analysis of EWEB's electric system on a case-by-case basis at the time and location of interconnection. If Staff determines that any particular generation project that is eligible for EWEB's Avoided Cost pricing results in a material distribution cost savings for EWEB, then it may be appropriate to allocate a portion of those cost savings to the project through direct incentives, programs, or a custom contract.

One of Staff's primary goals in reformulating EWEB's Avoided Cost schedule for 2025 is to allow EWEB to appropriately value a variety of different resource types that could support the utilities emergent power portfolio requirements. EWEB does not currently have an active plan for new resource development. Should this change, then EWEB's Avoided Cost schedule may be further refined to reflect the value of new resources that EWEB would be looking to procure.

B. Limits to Avoided Costs Applicability

Adopting a more granular approach to calculating EWEB's Avoided Costs would allow Staff to better align EWEB's future real energy portfolio needs, by providing financial incentives needed to acquire new resources. Staff is mindful, however, that there are still limits to the applicability of these Avoided Cost rates given assumptions made by staff and/or uncertainty surrounding a new potential generator. Those limits and assumptions include:

- To be eligible to sell power to EWEB at its Avoided Cost prices, a generator must be certified with the Federal Energy Regulatory Commission ("FERC") as a QF. Non-QFs may still seek to sell power to EWEB, but it would be at EWEB's sole discretion as the PURPA must-purchase obligation would not apply.
- If QF generation is not delivered directly to EWEB's electric system then procurement, and any incremental costs, of transmission shall be borne by the generator and not EWEB.
- If BPA requires EWEB to pay for a Resource Shaping Service ("RSS") to integrate a QF project into BPA's balancing area, then those RSS costs must be borne by the new generator. For context, BPA's RSS charges for intermittent generation have historically rendered QF development uneconomic. Staff will be closely monitoring any potential changes to BPA's RSS policies and charges post-2028.
- QFs that wish to interconnect directly with EWEB's electric system would be subject to all EWEB
 interconnection policies and requirements, including payment of any applicable generator

³ Forward energy markets are actual market prices, which can be transacted at today, for energy that will flow in a future period.

interconnection fees and system upgrade costs. QF's directly interconnecting with EWEB's electric system would also be subject to BPA's Balancing Authority Area policies and charges, which may include compliance with BPA's resource "integration" requirements.

EWEB's Avoided Cost schedule assumes that all environmental benefits would be transferred to EWEB.
 If a QF does not transfer environmental benefits to EWEB, then Staff would adjust the purchase price accordingly to reflect the reduction in value of the resource.

C. Future Avoided Cost Updates

EWEB's 2023 Integrated Resource Plan (IRP) shows that EWEB may need additional energy generation resources in the future. The IRP recommends several actions to meet this future need in accordance with EWEB vision, Board Policies, and strategy. Depending on the outcome of those actions, it is likely that EWEB will seek to further revise its Avoided Costs to align with EWEB's energy supply trajectory. Here are some actions that could trigger future updates to EWEB's Avoided Cost calculation methodology:

- BPA Contract Engagement: Staff are actively working with BPA to negotiate the next BPA power contract, which is expected to start in October 2028. EWEB's BPA product selection for this 2028 contract, or a subsequent determination for serving above high watermark load, will likely influence EWEB's future Avoided Costs.
- Resource Acquisition Framework: Staff are working to develop a future resource acquisition framework. This work may provide guidance or additional detail that could further inform EWEB's Avoided Costs.
- Market Analysis: The proposed 2025 Avoided Cost schedule includes a value for capacity that is informed
 by an assumption that EWEB will directly participate in WRAP. If EWEB decides that it will no longer
 directly participate in WRAP, then it may be appropriate to reevaluate capacity values embedded in the
 Avoided Cost pricing.

D. Future Board Policy Considerations

As a non-regulated utility in the state of Oregon, EWEB's board retains the right to enact PURPA specific policies to clarify or standardize how Staff manage QF generation requests. Today, any QF generator request would result in a one-off process to evaluate the Avoided Cost of a specific generator, negotiate contract terms, and then seek Board approval. For now, given a lack of QF generator interest, this approach fits EWEB's need. However, should EWEB begin to see an increase in interest from PURPA generators, it might make sense for the Board to consider future policy changes including:

Standard Offer for Small QFs: EWEB currently has no express policy governing power purchases from QFs under PURPA. The Board could consider adopting a policy pursuant to which EWEB would make a "standard offer" to eligible small QFs having a nameplate capacity of less than 3 MW. In other words, small QFs could elect to sell their project output to EWEB at EWEB's published Avoided Cost rates without the need to negotiate project-specific pricing terms. Staff believes that 3 MW is an appropriate threshold for "standard offer" eligibility because QFs 3 MW or larger are generally more complex and will have costs/benefits that are not accounted for in these Avoided Cost rates. For example, BPA, acting in its capacity as the BAA, requires generators with a nameplate of 3 MW or larger to be modeled in the Energy Imbalance Market ("EIM"). This means that the QF will be subject to EIM settlement and will require complex scheduling services. A QF that is 3 MW or larger could still sell its output to EWEB, but the pricing would be contingent on EWEB's calculation of an Avoided Cost price that is specific to that QF based on certain factors articulated by FERC.

As part of any future PURPA policy, the Board could also consider adopting standard contract terms similar to those offered by regulated utilities. Adopting standard contract terms would allow EWEB to, in effect, dictate the terms and conditions of any purchase from a small QF. It would also allow EWEB Staff and Management to execute purchase agreements with small QFs without the need to engage in potentially lengthy contract negotiations and without the need for prior Board approval of each contract.

• Contract Length for PURPA Contracts: One important consideration for any potential PURPA contract is the length of the contract term. As noted above, EWEB is not subject to the 20-year PURPA contract requirement applicable to regulated utilities. Multi-year, fixed price contracts, create more certainty for QF developers. However, as a general rule, the longer a contract obligates EWEB to pay fixed prices to a QF, the more likely it is that the fixed prices will eventually deviate from EWEB's actual Avoided Costs. While this deviation between future prices and costs is an unknown that could work either in EWEB's favor or not, the risk can be mitigated by either reducing the contract term or by expressly allowing the contract prices to be periodically updated during the contract term. Board policy on contract length could help to provide clear direction for standard offer contract deals.

Staff are not currently seeking action on policy changes but recognize that as we modernize our Avoided Cost practices, and shift our trajectory on resource acquisition, that it may makes sense to review and refresh PURPA related Board policies as well.

Recommendation

Staff recommends that the Board approve the updated Avoided Cost schedule attached hereto as Attachment B, with recommended limitations, to maintain compliance with OAR 860-029-0080(2).

Requested Board Action

Approve Resolution No. 2413 to authorize and direct Staff to file the updated Avoided Cost prices with the PUC in accordance with OAR 860-029-0080(2) on or before December 31, 2024.

Attachment A

EWEB Avoided Costs*

Effective January 2023 \$/MWH

Year	Energy Price
2023	\$34.86
2024	\$34.11
2025	\$32.10
2026	\$33.43
2027	\$34.43
2028	\$34.13
2029	\$34.56
2030	\$35.34
2031	\$36.09
2032	\$36.19
2033	\$36.89
2034	\$37.69
2035	\$37.22
2036	\$38.51
2037	\$36.72
2038	\$37.95
2039	\$38.98
2040	\$37.08
2041	\$34.15
2042	\$30.63

^{*}EWEB's avoided cost prices may be adjusted to account for costs related to the shaping, integration, dispatchability, transmission and distribution, and environmental attributes, of a given QF resource.

Attachment B

Proposed Forecast of EWEB Avoided Costs

Effective January 2025 \$/MWH

	Baseload/Biomass	Wind	Eastern OR. Solar⁴	Eugene Solar⁵
2025	86.50	63.75	68.50	\$63.25
2026	86.50	63.75	68.50	\$63.25
2027	64.90	49.88	53.02	\$49.55
2028	37.43	32.47	33.51	\$32.36
2029	23.65	23.65	23.65	\$23.65
2030	24.26	24.26	24.26	\$24.26
2031	24.99	24.99	24.99	\$24.99
2032	24.95	24.95	24.95	\$24.95
2033	25.58	25.58	25.58	\$25.58
2034	24.99	24.99	24.99	\$24.99
2035	25.49	25.49	25.49	\$25.49
2036	26.00	26.00	26.00	\$26.00
2037	26.52	26.52	26.52	\$26.52
2038	27.05	27.05	27.05	\$27.05
2039	27.59	27.59	27.59	\$27.59
2040	28.15	28.15	28.15	\$28.15
2041	28.71	28.71	28.71	\$28.71
2042	29.28	29.28	29.28	\$29.28
2043	29.87	29.87	29.87	\$29.87
2044	30.47	30.47	30.47	\$30.47

Limits and restrictions:

- Listed Avoided Cost prices are an indicative forecast as of the time of publication and include value for energy, capacity, transmission savings and environmental attributes.
- Actual Avoided Cost prices are subject to adjustment given a QFs specific characteristics. Prices will
 also be adjusted to account for any costs or benefits incurred by EWEB related to shaping, integration,
 dispatchability, distribution, BPA BAA scheduling requirements, EIM requirements. PURPA contracts
 are subject to negotiation and EWEB Board approval.
- QFs that are remote to EWEB's system are responsible for both procurement obligation and cost of all transmission required to bring output to EWEB's system.
- QF are subject to all EWEB and BPA BAA interconnection and integration policies and may be subject to generator interconnection fees, system upgrade costs, and RSS charges.

⁴ Eastern OR. Solar are generally projects located in Oregon, located east of the Cascade mountains, with solar irradiance that is greater than 4.00 kWh/m^2/Day

⁵ Eugene Solar are solar generation projects that are directly interconnected to EWEB's system per EWEB's interconnection policies.

RESOLUTION NO. 2413 SEPTEMBER 2024

EUGENE WATER & ELECTRIC BOARD **EWEB 2025 AVOIDED COST PRICE UPDATES**

WHEREAS, the Federal Public Utility Regulatory Policy Act ("PURPA") requires all electric utilities to purchase the generation from qualifying facilities at such utility's Avoided Cost; and

WHEREAS, ORS 758.525 require EWEB to file a non-binding schedule of its Avoided Costs with the Oregon Public Utilities Commission ("OPUC") every two years; and

WHEREAS, the Oregon OPUC does not review or approve EWEB's Avoided Costs, but is required to accept EWEB's filing and make the filing publicly available; and

WHEREAS, EWEB Staff has calculated a schedule of Avoided Costs for 2025 through 2044 based on forecasts of wholesale power costs, which schedule EWEB management proposes to file with the OPUC on or before December 31, 2024; and

WHEREAS, the Board has reviewed the attached Avoided Cost schedule and, at its September 3rd, 2022 Board Meeting, approves filing such avoided cost schedule with the OPUC.

NOW, THEREFORE, BE IT RESOLVED by the Eugene Water & Electric Board that the Board hereby approves filing with the OPUC the attached Avoided Costs prices as presented and proposed by management for calendar year 2025 and beyond, until such time as the Board approves new values.

Dated this 3rd day of September 2024

THE CITY OF EUGENE, OREGON Acting by and through the EUGENE WATER & ELECTRIC BOARD
President
alified, and acting Assistant Secretary of the Eugene Water as above is a true and exact copy of the Resolution adopted and Meeting.

Assistant Secretary