MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

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

FROM: Brian Booth, Chief Energy Resources Officer; Megan Capper, Energy Resources Manager; Jon Hart, Power Planning Supervisor; Aaron Bush, Energy Resource Analyst

DATE: October 27, 2023

SUBJECT: PURPA Standards Determination Recommendation – Demand Response and Vehicle Electrification

OBJECTIVE: Action

Issue

As discussed at the September and October Board meetings, recent legislative changes to the federal Public Utility Regulatory Policies Act ("PURPA") require EWEB to consider and respond to new demand response (DR) and electric vehicle charging programs (EV) standards. Since those Board meetings, EWEB has solicited customer feedback and staff have developed recommendations on whether the standards are appropriate for EWEB. This memo includes management and staff's recommendations, and discussion of public comment. The Board will be asked to issue a determination on whether the new standards are appropriate for EWEB at the November Board meeting.

Background & Discussion

Staff's initial analysis suggested that the proposed PURPA standards are broadly aligned with EWEB's strategic direction but would require clarifications to be 'appropriate' for us. *After reviewing public comment, staff and management recommend adopting a determination that finds the standards 'appropriate with clarifications*.' Key attachments to this memo include:

- Attachment A: Staff Analysis and Recommendation
  - Outlines EWEB's analysis, summarizes public input and EWEB's responses, and includes the proposed determinations.
- Attachment B: Resolution No. 2317
  - Contains the resolution to adopt the Staff Analysis and Recommendations in Attachment A.

Consideration and Determination

Adopting a PURPA standard is an indication of overall policy direction and should reflect the strategic direction of the utility and its existing circumstances. Adoption of a standard is also a snapshot in

time. If EWEB adopts the standards and finds that they are no longer appropriate at a future date, EWEB may change utility practices or policies accordingly, without reopening the old determinations. EWEB has adopted numerous PURPA standards in the past, and our business practices and policies have changed without having to reconsider the relevant standards. As discussed during prior meetings, the primary PURPA requirements for EWEB are to conduct a public hearing and issue a written determination with our findings.

Public Feedback

EWEB received about forty comments during the public hearings process, primarily through email. These have been made available to the Board. The majority of these comments were received after EWEB reached out to groups and individuals who had commented on the Integrated Resource Plan (IRP), and after EWEB issued a press release describing the proposed standards, which was picked up by the Register Guard.

While EWEB received comments expressing varied opinions and perspectives, EWEB acknowledges that there may be other perspectives which have not been heard. EWEB's customer groups are not all equally engaged in our public processes, and it is possible that the current comments do not represent the entire range of viewpoints on these standards. Staff does not have reason to believe that further comment would result in a change to EWEB's plan for adoption, but would encourage EWEB to consider strategic approaches to soliciting feedback from a wide variety of stakeholders for future actions, programs, and rates related to these standards.

Comment Review

Staff have included a brief summary of public comments and EWEB's responses in Attachment A, the Final Order. In the Final Order, the comments and responses are broken out by the standard they address. However, there are broader themes that emerge which should be familiar to the Board. These themes are:

1. EWEB's role in decarbonizing our electric supply *as well as* reducing overall societal emissions, and the appropriateness of using ratepayer dollars to achieve this.
2. Rate design, and the equitable treatment of different customers or customer classes.

In general, customers who supported adopting the standards were those who place a high emphasis on EWEB being a catalyst for achieving decarbonization goals. These customers often indicated that they owned, or supported adoption of electric vehicles to reduce carbon emissions, and desired that EWEB take additional steps to spread EV adoption and integrate renewable resources. These customers also noted that EVs are ideal candidates for creating and receiving value from demand response or time-of-use pricing.

Customers who were opposed to the standards generally questioned whether it is appropriate for EWEB to take on a role incentivizing electric vehicles, and were concerned that the costs of EV programs would be passed to customers who did not benefit from them. Similarly, these customers were concerned that demand response programs would harm specific customers who could not shift their consumption patterns, especially low-income or vulnerable populations.

Balancing Perspectives in Rate and Program Design
Part of the value of the public hearings process for the PURPA standards is that it allows EWEB to consider the diverse needs and interests of its customers. Just as with other aspects of EWEB's policies, resource decisions, and overall rate design, EWEB must balance these perspectives while taking into account overall strategic direction and the utility's organizational values.

Key Points About Demand Response Programs

- Demand response programs are intended to reduce EWEB's total costs to provide power to our community, and as a result reduce overall rates.
- As EWEB designs and implements demand response programs and rates, the Board and management will apply adopted policies such as our carbon policy, DEI policy, and utility values.

Key Points About Electric Vehicle Charging Programs and Incentives

- Funding for EWEB's existing EV programs and incentives comes from Oregon Clean Fuels credits, which are generated when EV owners in EWEB's service territory charge their cars.
- EWEB's current rate design for distribution infrastructure upgrades requires the party who causes the need for the upgrade to cover those costs.
- As EWEB designs and implements electric vehicle charging programs, the Board and management will apply adopted policies such as our carbon policy, DEI policy, and utility values.

Time-of-Use Rates
While time-of-use rates were discussed in prior memos, and are highly related to demand response practices, time-of-use rates are not explicitly included in the new demand response standard. Time-of-use rates are relevant to the current discussion because they are likely to be implemented in a similar time frame to demand response and will likely raise similar concerns and support.

Board Resolution: Staff Analysis and Recommendation
Management recommends finding the EV and DR standards to be appropriate for carrying out PURPA's purposes, with clarifications. Staff's analysis and the recommended determinations are included in Attachment A. The resolution to adopt the Final Order and determinations is included as Attachment B.

Recommendation and Requested Board Action
Management requests approval of Resolution No. 2317 adopting the *Staff Analysis and Recommendation* in Attachment A. Recommended Motion…"move to approve Resolution 2317 adopting the Staff Analysis and Recommendation on PURPA's Demand Response and Electric Vehicle Charging Standards".

EUGENE WATER AND ELECTRIC BOARD

PUBLIC UTILITY REGULATORY POLICIES ACT

STAFF ANALYSIS AND RECOMMENDATION

ELECTRIC VEHICLE CHARGING STANDARDS

DEMAND RESPONSE STANDARDS

NOVEMBER 7, 2023

EWEB Evaluation of New PURPA Standards

The federal Public Utility Regulatory Policies Act (PURPA) of 1978, as amended by the Infrastructure Investment and Jobs Act of 2021, established new standards for demand response practices and electric vehicle (EV) charging programs as described below. PURPA requires certain non-regulated utilities, such as EWEB, to evaluate whether it is appropriate for EWEB to implement such standards to carry out the purposes of PURPA.

EWEB posted notice on its website and in a local publication of the evaluation process for the new federal standards. EWEB provided information on the new standards and existing EWEB EV and demand response programs. EWEB invited public input on the potential adoption of the new federal standards. EWEB received a total of 42 comments which were considered by EWEB staff in this evaluation.

PURPA Demand Response Standard

The purpose of this standard is to promote demand response practices. The standard permits EWEB to design rates for this purpose. The PURPA statute describes the standard as follows:

> ***Demand-response practices***
>
> *(A) In general*
> *Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial consumers to reduce electricity consumption during periods of unusually high demand.*
>
> *(B) Rate recovery*
> *A nonregulated electric utility may establish rate mechanisms for the timely recovery of the costs of promoting demand-response and demand flexibility practices in accordance with subparagraph (A).*

Is the PURPA Demand Response Standard Appropriate for EWEB:

The proposed PURPA demand response practices are conceptually aligned with EWEB's strategic direction as well as EWEB's expectations for future energy system dynamics. The following are reasons why the PURPA demand response practices are appropriate for EWEB:

- Demand response was selected as a cost-effective resource in the EWEB Integrated Resource Plan (IRP) and is part of the EWEB IRP Action Plan.
- Demand response can reduce EWEB's peak planning obligations and reduce the need to purchase new generating resources.
- Demand response potential is expected to grow as electric vehicles, smart thermostats, and other 'DR capable' technologies become more prevalent.
- Resource mix and load changes (renewable resources and electrification) point to greater needs and opportunities to shift peak load through DR.

While the demand response practices in subsection (A) of the PURPA standard are conceptually appropriate for EWEB, there are existing barriers to implementation for EWEB. These include:

- EWEB is in process of completing advanced metering infrastructure (AMI) installation and billing systems upgrades that are necessary for demand response and dynamic rates.
- EWEB has several steps to take before we can meet the standards (designing and implementing programs, designing rates, etc.).
- Currently there is not a price signal for customers to implement demand response. EWEB will assess demand response potential as part of the IRP.

Several of these barriers relate to the rate recovery aspect of the of the standard. Subsection (B) of the PURPA standard expressly recognizes that establishing rate mechanisms for the timely recovery of costs may be necessary to implement the demand response practices.

Is EWEB Implementation Appropriate to Carry Out PURPA Purposes

EWEB implementation of the demand response practices would be aligned with PURPA's purposes to promote efficient use of facilities and conserve energy. The primary distinction between demand response and energy conservation is that demand response targets peak load and efficient use of *capacity*, whereas energy efficiency targets efficient use of *energy*. This distinction is reflective of the change in energy system dynamics between the 1970's and 2023.

In the 1970's most electric generators burned fossil fuels which were scarce and expensive at the time. Conserving *fuel* was the primary goal. In contrast, with the proliferation of renewable resources today, energy fuel costs are expected to become less expensive with energy production more intermittent. However, with this shift in resource mix, capacity (the ability to generate as needed at peak times), will become scarcer. In this context, the demand response standard is appropriate to incentivize efficient use of resources and defer investment in new peak generating resources.

Public Comment

Summary of Comments

Public comment generally supported implementation of demand response practices as a means to reduce peak energy consumption and lower EWEB's carbon footprint. Comments opposed to EWEB's implementation of the demand response practices noted concerns for increases to electricity prices, and exposing low income or vulnerable populations to increased rates that they may not be able to afford.

In general, EWEB implementation of demand response practices is supported by commenters who:

- Own electric vehicles or other technology that would align well with demand response practices.

- Experienced demand response or time-of-use practices in other service territories.
- Are interested in integrating renewable energy and/or decreasing reliance on market purchases as a means to lower EWEB's carbon emissions.

In general, EWEB implementation of demand response practices is opposed by commenters who:

- Are concerned that EWEB would be raising rates, or 'penalizing' customers for using energy when they need it the most on hot or cold days.
- Are concerned that the rates would disproportionately impact customers who could not actually change their energy patterns (due to technological barriers or actual consumption needs).

Response to Comments

The purpose of EWEB's implementation of the proposed demand response practices would be to reduce EWEB's peak consumption and avoid exposure to high market prices or need for new, expensive generating resources. To this end, EWEB would adopt and implement demand response practices in order to lower EWEB system costs and keep rates lower for its customers.

EWEB acknowledges that *actual* demand response program design, electric pricing structures, and access to demand-response-ready technology will affect the value of demand response to different customers and customer classes. As with EWEB's approach to overall rate design, the Board and management should consider these impacts in future decision-making to ensure that demand response programs align with community needs and values.

Recommended Determination on Demand Response Standard

After considering public comment and conducting analysis, EWEB staff recommends a determination that implementation of the demand response standard is appropriate for EWEB and consistent with PURPA's purposes, subject to the following clarifications and modifications:

- EWEB cannot currently implement the demand response standard and will not do so until the utility has achieved necessary metering and billing systems upgrades.
- If EWEB finds that demand response practices do not align with utility needs or values, EWEB reserves the right to halt or alter these programs.
- EWEB will continue to install advanced metering infrastructure.
- EWEB will update its billing system to incorporate demand-response ready billing capabilities.
- EWEB will conduct a demand response potential assessment as described in the IRP Action Plan.
- Pending the completion of the items listed above, EWEB will implement demand response pilots or programs as deemed appropriate by the Board and management.
- EWEB will incorporate adopted policies such as our carbon policy, DEI policy, and utility values into decisions on demand response practices and rate design.

PURPA EV Charging Program Standard

The purpose of the PURPA EV charging standard is to promote transportation electrification. The standard lists several mechanisms (A-D, below) intended to achieve this goal. The PURPA statute describes the standard as follows:

> ***Electric vehicle charging programs***
>
> *Each State shall consider measures to promote greater electrification of the transportation sector, including the establishment of rates that—*
>
> *(A) promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure;*
>
> *(B) improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium-, and heavy-duty vehicles;*
>
> *(C) accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and*
>
> *(D) appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.*

Is the PURPA EV Charging Program Standard Appropriate for EWEB?

The PURPA EV charging standard is conceptually aligned with EWEB's strategic direction. The following are reasons why promoting electrification of the transportation sector is appropriate for EWEB:

- EWEB has several existing programs and incentives for EV charging infrastructure.
- The standard is consistent with EWEB Board Policy SD15 Climate Change Policy which supports customer decarbonization.
- The purpose of the standard, to promote electrification of the transportation sector, is aligned with EWEB's support for CAP2.0, Eugene's climate action plan. These commitments call out specific actions that EWEB will take to help reduce community fossil fuel use (such as promoting electric vehicles).

While the broad purpose of the standard, to promote vehicle electrification, is conceptually appropriate for EWEB, EWEB will require additional clarifications and modifications to implement the standard. The subsections below respond to subsection A-D of the proposed PURPA standard as quoted above.

(A) While it is appropriate for EWEB to promote affordable charging infrastructure, PURPA's use of the term 'equitable' is ill-defined and does not encompass the full range of issues related to access. For example, promoting charging infrastructure does not address whether customers can afford EVs, or whether EVs are best suited to meet our customer's

needs. EWEB should maintain the ability to design and implement programs that meet our customers' needs and interests. Similarly, EWEB should address broader issues of general mobility and transportation options and equity rather than follow a narrowly defined 'electric vehicle' standard. By mobility and transportation options, EWEB means non-vehicle transportation methods such as walking, biking with traditional and e-bikes, inter- and intra-city public transit options including use of electric buses and shuttles, bike and EV car-share programs, and the intersection or linking of these systems throughout the community. In general, EWEB's programs go above and beyond the proposed PURPA standard in considering equity issues.

(B) EWEB has already implemented programs to increase access to EV chargers and reduce charging times. However, EWEB cannot unilaterally 'improve the customer experience,' as this is a broader issue related to access, EV design, and higher-level policy. Additionally, increasing charging speeds (and reducing charging time) tends to increase the cost of energy delivery. While it is not mutually exclusive for EWEB to offer faster charging and offer more affordable charging options, there is a tension between these goals that will need to be balanced in future decisions and ratemaking.

(C) EWEB has already implemented programs and incentives to support investment and installation of EV infrastructure by other parties. Supporting third party investment can help bring in additional, outside funding for EV infrastructure and increase opportunities for access. However, the term 'accelerate' implies a level of control over outcomes that EWEB may not have. EWEB believes that an appropriate modification of the standard for EWEB would be to 'enable or facilitate' third-party investment. Additionally, many third parties do not have the same mandate to promote the public good as EWEB, and their rate designs or other decisions may not reflect community values or equity considerations in the same way that EWEB would incorporate these.

(D) EWEB expects EV adoption to occur. By incorporating marginal costs into our rate design, we can reinforce the value that Managed EV charging programs create as a tool to mitigate peak load impacts. However, marginal cost recovery may not always result in an 'equitable' outcome, and EWEB will need to consider how affordable charging options intersect with rate design and charging speeds.

Is EWEB Implementation Appropriate to Carry out PURPA Purposes?

In contrast to the demand response standard, which would reduce peak load, EWEB implementation of the PURPA EV standard is likely to *increase* peak load. On its face, this is contrary to the purpose of PURPA to *reduce* energy consumption. However, given the societal transition to renewable energy, EWEB should consider the standard in a broader context. Viewed as a mechanism to use renewable energy resources more efficiently for mobility outcomes, vehicle electrification presents an opportunity to take advantage of existing infrastructure and expected generating resource characteristics.

Public Comment

Summary of Comments

Public comment was split in support for, or against, implementation of the PURPA EV charging standard as a means to improve charging infrastructure and help Eugene meet climate goals. Comments opposed to EWEB implementation of the PURPA EV charging standard noted concerns for passing costs of EV's on to other customers, decreasing system reliability and/or increasing electric system carbon emissions due to increased demand, and stated that it is not EWEB's role to provide funding for EVs.

In general, EWEB implementation of the EV charging standard is supported by commenters who:

- Own electric vehicles and see a need for improved charging infrastructure.
- Own electric vehicles and appreciate the home-charger rebate EWEB provides.
- Are interested in reducing community carbon emissions.
- Are interested in increasing equitable access to charging infrastructure for renters and other member of the community.

In general, EWEB implementation of the EV charging standard is opposed by commenters who are concerned that:

- EVs already receive substantial subsidies and believe it is not EWEB's role to provide EV-specific funding.
- EWEB would pass the costs of EV programs on to other customers who would not benefit.
- Increased electric demand from EVs could lead to reduced system reliability and/or increased electric system carbon emissions.
- Costs of local system upgrades to support electrification would be passed on to all customers, regardless of whether those individual customers benefit.

Response to Comments

The source of funding for EWEB's current EV programs and incentives comes from Oregon's Clean Fuels Program. Through this program, EWEB receives credits when residential customers charge their electric vehicles, and when EWEB-owned charging infrastructure is used. EWEB then markets these credits and uses the resulting revenue to fund EV programs. Because this funding stream is created by the behavior of existing EV owners in EWEB's service territory, it is not creating cost shifts between customer groups.

Going forward, as with all aspects of EWEB's rate design and electric service, EWEB will consider how to align cost-causation, equity, and community and utility values. Broader societal electrification, not just EVs, is expected to increase demand on the electric system, and EWEB will need to balance a variety of competing interests and factors in deciding how costs and benefits are allocated to different members of the community. EWEB currently assigns costs for distribution system upgrades to the customer who has caused the need for the upgrade.

Questions about EWEB's future resource mix and overall electric system reliability are discussed and analyzed in EWEB's Integrated Resource Plan (IRP). The IRP examines the portfolio of resources required for EWEB to provide reliable, cost-effective power that aligns with community values. This includes the constraint that EWEB's portfolio will be 95% carbon-free on a planning basis by 2030. EWEB is also participating in regional initiatives such as the Western Resource Adequacy Program that is intended to support and incentivize resource development for reliable load service.

Recommended Determination on EV Charging Standards

After considering public comment and conducting analysis, EWEB staff recommends that implementation of the electric vehicle charging standard is appropriate for EWEB and consistent with PURPA's purposes, subject to the following clarifications and modifications:

- If, at a future date, EWEB finds that the EV charging program standard does not align with utility needs or values, EWEB reserves the right to halt or alter its EV programs.
- EWEB should adopt the following modifications and clarifications of the proposed electric vehicle charging standards (items A-D above):
    (A) EWEB reserves the right to promote 'affordable' and 'equitable' options as defined by the Board, management, and utility values.
    (B) EWEB cannot unilaterally improve the customer experience. EWEB will balance customer interest for reduced charging times with other considerations such as cost, accessibility, equity, and impact to the electric grid.
    (C) EWEB will 'enable' and 'facilitate' third-party investment in charging infrastructure. EWEB may choose to support or incentivize third-party investment as determined appropriate by the Board and management, in alignment with EWEB's values.
    (D) EWEB reserves the right to design rates to recover the costs of delivering electricity as deemed appropriate by the Board and management. This includes determining how to recover 'marginal' costs of delivering power to electric vehicles.
- EWEB will continue to implement current EV programs and incentives until and unless these are determined by the board to no longer be appropriate.
- EWEB will apply adopted policies such as our carbon policy, DEI policy, and utility values into future decisions around EV charging infrastructure and programs.

RESOLUTION NO. 2317
NOVEMBER 2023

EUGENE WATER & ELECTRIC BOARD
DETERMINATION ON IMPLEMENTATION OF PURPA STANDARDS

WHEREAS, the Public Utility Regulatory Policies Act (PURPA) of 1978, as amended by the Infrastructure Investment and Jobs Act of 2021, established new standards for demand response practices and electric vehicle charging programs; and

WHEREAS, the PURPA statute requires certain non-regulated utilities, such as EWEB, to determine whether it is appropriate to implement such standards to carry out the purposes of PURPA; and

WHEREAS, EWEB provided notice of the determination process for the new federal standards and solicited public input on the potential implementation of the new federal standards; and

WHEREAS, EWEB staff considered the public comments and performed an analysis of whether it is appropriate for EWEB to implement the proposed standards consistent with the purposes of PURPA; and

WHEREAS, the EWEB Staff Analysis and Recommendation is attached to this Resolution as Attachment A.

NOW, THEREFORE, BE IT RESOLVED by the Eugene Water & Electric Board, that implementation of the PURPA demand response standard is appropriate for EWEB and consistent with PURPA's purposes, subject to the clarifications and modifications described in the Staff Analysis and Recommendation.

BE IT FURTHER RESOLVED, that implementation of the PURPA electric vehicle charging program standards is appropriate for EWEB and consistent with PURPA's purposes, subject to the clarifications and modifications described in the Staff Analysis and Recommendation.

DATED this 7th day of November 2023.

THE CITY OF EUGENE, OREGON
Acting by and through the
Eugene Water & Electric Board

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President

I, ANNE M. KAH, the duly appointed, qualified, and acting Assistant Secretary of the Eugene Water & Electric Board, do hereby certify that the above is a true and exact copy of the Resolution adopted by the Board at its November 7, 2023 Regular Board Meeting.

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Assistant Secretary