



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, Resource Analyst
DATE:	August 25, 2023
SUBJECT:	New PURPA Standards – Demand Response and Vehicle Electrification
OBJECTIVE:	Information

Issue

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 before November 15, 2023. This memo provides background information on PURPA, the new standards, and a brief description of EWEB's relevant existing and planned EV and DR programs and policies. Staff will provide summary of public comment and updated analysis, including initial leanings on the appropriateness of the new standards, at the October Board meeting. The Board will be asked to issue a determination on the new standards at the November Board meeting.

Background and Discussion

PURPA was passed in 1978 to promote conservation of energy, efficient use of facilities and resources, and provide equitable rates to customers. Over the years, PURPA has been updated with new standards. These updates have occurred in 1992, 2005, and more recently in 2021 with the Infrastructure Investment and Jobs Act. For each new standard, PURPA requires that utilities such as EWEB conduct a public hearing to consider and issue a written determination of whether to adopt the standard.

As discussed in the PURPA Manual and Process memo from this month's Board materials, EWEB's existing Manual for consideration and determination of new standards is outdated and should be replaced. If the new PURPA Hearings Process is approved by the Board, EWEB will follow the new procedures to conduct a public hearing and solicit feedback from the community on the new EV and DR standards. Public comment, as well as staff analysis and recommendations, will be considered by the Board in making its determination on adopting the standards.

How do PURPA Standards Apply to EWEB?

For PURPA, EWEB is a 'nonregulated' utility, meaning that we are overseen by a local board or governing authority and not by the state regulatory commission. As such, we have been given substantial authority to self-govern and determine whether to adopt new standards. Additionally, compliance with PURPA is a snapshot in time, and EWEB is *not required* to

reevaluate old standards. EWEB *may* readdress old standards at any point in the future if it is deemed prudent.

What is the Determination that is Being Made?

EWEB must determine whether the new DR and EV standards are "appropriate" for EWEB. Specifically, EWEB must "make a determination concerning whether or not it is appropriate to implement" the new EV and DR standards to carry out the purposes of the PURPA. As mentioned above, the broad PURPA purposes are to:

- Promote conservation of energy,
- efficient use of facilities and resources,
- and provide equitable rates to customers.

This means that EWEB will be evaluating the new EV and DR standards in the context of our existing power supply, programs and policies, as well as how the standards align with energy conservation, equitable rates, and efficient use of resources.

The new EV and DR standards have a primary purpose, as well as supporting 'sub-bullets'. EWEB can adopt the standard in whole, including all the sub-bullets, or in part. If EWEB adopts the standard 'in part', it means that there are aspects to the standard or its sub-bullets that are not appropriate for EWEB or are not aligned with the PURPA purposes. EWEB may choose not to adopt a standard if that standard is contradictory to the purposes of PURPA, does not align with our strategic goals, is not a good fit for EWEB, or EWEB does not have the capability to implement the standard under existing conditions.

Adopting a PURPA standard is an indication of overall policy direction and should reflect the strategic direction of the utility and its existing circumstances. If EWEB adopts a PURPA standard, it shows that EWEB's analysis and consideration found that for EWEB, the standard is appropriate and consistent with the purposes of PURPA at the time of the determination.

Said another way, the factors influencing EWEB's determination on a new standard should not be a surprise to the Board or EWEB's customers. The utility has already performed analysis and developed policies and programs related to the proposed standards and these are reflective of their appropriateness for EWEB. Additionally, adopting a PURPA standard does not lock EWEB into a specific course of action that binds the utility from adapting to new conditions or information. EWEB can reevaluate standards if desired, and because the determination is a snapshot in time, the decision reflects a specific set of circumstances.

What Does EWEB Need to Consider in its Analysis?

As with other aspects of PURPA, EWEB has discretion over the type of analysis used to consider the EV and DR standards. In general, the analysis should provide information to help determine the appropriateness of a standard for EWEB. In the PURPA Hearings Process memo, staff propose to provide specific information and analysis related to the new EV and DR standards. These include:

- A description of the purpose of the new PURPA standard.
- Information about EWEB's relevant existing programs or policies.
- Information about EWEB's relevant planned programs or policies.
- Analysis of the potential costs and benefits of the proposed standard.
- Analysis of the 'appropriateness' of the standard to EWEB.

This information will provide context to the Board for the new standards and how they align with EWEB's existing programs and strategic direction. Staff will also incorporate public comment into the analysis and recommendation. The two sections below on the EV and DR standards provide a brief background on relevant EWEB programs and policies.

PURPA Demand Response Standard

The proposed PURPA demand response standard is described below. It states that utilities should promote demand response practices, and permits utilities to design rates for these.

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).

EWEB Existing and Planned Demand Response Programs and Policies

EWEB does not currently have any demand response programs or incentives, including Time of Use rates, in place. In the past, EWEB has conducted several demand response test pilots and performed analysis on the cost-effectiveness of demand response in our service territory. These include, among others:

- Water heater energy storage and load shifting/peak reduction
- Time of use rates & customer behavioral changes
- Microgrid + generation & storage

Several factors have contributed to these pilots not moving on to become established programs.

1. EWEB is in process of completing advanced metering infrastructure (AMI) installation and billing systems upgrades that are necessary for demand response and dynamic rates.

2. The costs of the programs outweighed their benefits, and as such there has not been an economic incentive to pursue them.

Because demand response is generally intended to incentivize hourly or sub-hourly load reduction behaviors, it is infeasible for EWEB to implement these programs without the data or tools to align billing with energy usage. Advanced metering technology and upgraded billing systems allow EWEB to monitor and bill customers' dynamic energy consumption. EWEB is currently in-process of rolling out AMI to customers, and just over two thirds of electric customers now have AMI. Supply chain shortages related to the Covid pandemic contributed to longer deployment timelines than originally anticipated, although the supply outlook appears to be improving in later 2023. The AMI rollout is anticipated to be complete by late 2025. EWEB's billing system upgrade, part of the strategic EWEB Enterprise Solutions (EES) initiative, is expected to be online by 2025.

Notwithstanding the existing hurdles to demand response adoption outlined above, EWEB's recent Integrated Resource Plan (IRP) validated the potential future value of demand response to the utility. Changes in technology, energy system dynamics due to the proliferation of variable renewable energy resources, and EWEB's own load patterns, will all impact the value of DR to EWEB. For example, managed electric vehicle charging was identified as potentially one of the impactful and cost-effective programs to reduce peak demand by the 2030's. EWEB's IRP Action Plan calls for further study of demand response in our service territory.

In general, despite current logistical hurdles to implementation, EWEB is headed down a path towards programs and policies that prioritize demand response rates and technologies. EWEB's determination on the appropriateness of the DR standard is likely to hinge on this juxtaposition: EWEB may not currently be in a position to fully enact the standard, but the standard aligns with our long-term strategic goals and plans.

Electric Vehicle Charging Programs Standard

The proposed PURPA demand response standard is included below. It states that utilities should promote transportation electrification, and lists several rate mechanisms intended to do so.

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.

EWEB Existing and Planned Electric Vehicle Charging Programs and Policies

EWEB has several rebates and incentives for electric vehicle charging infrastructure. These include:

- Residential and commercial smart charger rebates
- Commercial DC fast charger rebates
- Electric bicycle rebates
- EV GoForth car share program

EWEB's EV programs are intended to support equitable access and adoption of electric vehicles by improving charging access and lowering the cost of entry to electrified transportation. EWEB has grant programs to support access, infrastructure, and adoption of electric vehicles by nonprofits, academic institutions, and public organizations. Several incentives are also available to commercial and larger-scale developers. EWEB's website lists the current programs for different customer groups and includes information about how to apply. Much of the funding for EWEB's EV rebates and incentives comes from the Oregon Clean Fuels Program. The program provides EWEB credits when our residential customers charge electric vehicles. EWEB remarkets the credits and uses the revenue for our EV programs.

EWEB does not currently implement specific EV rates to recover the costs of EV charging or infrastructure. However, EWEB's rebates require that charging infrastructure needs to be compatible with demand response technology.

Although EWEB does not have a specific policy to 'promote greater electrification of the transportation sector', as written in the new PURPA standard, many of our existing programs effectively do just that. Consideration of the new EV standard will also include analysis of whether the standard is appropriate to carry out PURPA purposes (conservation, equitable rates, and efficient use of facilities). If the standard is found to be appropriate, EWEB will also provide analysis on each of the 'sub-bullets' of the EV standard.

Proposed EV and DR PURPA process timeline

Pending Board approval of the new PURPA Hearings Process, staff have outlined a hearings process for consideration of the new EV and DR standards. The tentative dates and actions are bulleted below. EWEB staff will provide more in-depth analysis at the October Board meeting, and answer Board questions.

- September 8, 2023
 - Post public notice and commence public comment.

- Provide summary of EWEB existing and planned relevant policies and programs.
- October 3, 2023
 - Public comment at EWEB's October Board meeting, consistent with standard EWEB procedures (time limit of 3 minutes per speaker).
 - Staff to provide summary of public comment to date, as well as further analysis of EV and DR standards, including potential leanings on recommendations of whether to adopt.
- October 14, 2023
 - Close Public Comment.
- November 7, 2023
 - Staff recommended determination on new standards, as well as summary of public comment.
 - Board Resolution on whether to adopt staff's recommended determination of PURPA EV and DR Standards.

Recommendation and Requested Board Action

No action is requested at this time. The information is provided to facilitate Board discussion and feedback.