



30 October 2024

Via email to communityresiliency@pacificorp.com

Kimberly Alejandra
Regulatory Manager, Clean Energy Planning
PacifiCorp
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Re: PacifiCorp Battery Demand Response Program – “WattSmart”

Dear Ms. Alejandra,

Sierra Club, Mobilizing Climate Action Together (MCAT), the Oregon Citizens’ Utility Board (CUB), and the Oregon Solar + Storage Industries Association (OSSIA) (collectively, “Joint Organizations”) write to express support for PacifiCorp’s plans to bring its WattSmart battery demand response program to Oregon customers. Home energy storage, particularly when paired with rooftop solar, can provide significant customer and community benefits, ranging from improved resiliency to lower system costs. We understand that PacifiCorp initially intends to manage the batteries for strictly demand response—off-setting customers’ load—but that the Company will eventually add other capacities, including exporting the batteries’ energy back to the grid to maximize benefits. This would allow WattSmart batteries to be used as a virtual power plant, particularly if paired with other distributed energy resources like rooftop solar, smart thermostats and EV chargers, which can be a critical resource as PacifiCorp decarbonizes its system and provides clean energy 24/7 to Oregon customers. Indeed, the U.S. Department of Energy estimates that tripling the scale of virtual power plants across the country by 2030 could address 10-20% of peak demand and avoid \$10 billion in annual grid costs.¹

As the Company finalizes its WattSmart proposal for Oregon customers, we suggest that PacifiCorp consider the following modifications to broaden customer participation.

1. Provide increased, up-front incentives for low- and moderate-income customers

The Joint Organizations support PacifiCorp’s proposal to provide an upfront incentive payment to customers willing to invest in home battery systems. Upfront costs are often cited as the biggest obstacle to purchasing a home battery, and PacifiCorp’s proposed incentive (\$150/kW x annual commitment term) will likely help many Oregon households purchase home storage, particularly when those households can access additional incentives from the Energy Trust of Oregon (ETO) and the federal 30% investment tax credit (ITC). However, this incentive level,

¹ “Virtual Power Plants.” *Pathways to Commercial Liftoff*, liftoff.energy.gov/vpp/.

which works out to \$3,000 for a 5kW battery, may not be significant enough to support low- and moderate-income customers. These customers may not be able to finance the remaining cost of a battery, especially if they cannot take advantage of the ITC, which is true for many low- and moderate-income customers who do not have tax liabilities. To ensure that WattSmart is financially in-reach for all of PacifiCorp's customers, the Company should provide enhanced incentives for low- and moderate-income customers. For instance, in PGE's "SmartBattery" pilot, PGE included a \$5,000 upfront rebate for the first 25 income-qualified customers, all of which were fully claimed within the first year of the program. PGE had also offered lower upfront incentives for customers located in specific geographic areas, but found that "if PGE wants to encourage customers who otherwise are not planning on installing a battery to do so, more than \$3,000 is needed."² PacifiCorp could also mimic ETO's battery incentives, which provide higher incentives for lower income customers. For PacifiCorp customers, ETO's battery storage incentives increase from up to \$6,000 to up to \$10,000 for income qualified customers. Scaling the upfront incentive to provide additional support for low- and moderate-income customers will help to ensure that these communities are not left behind.

2. Consider a battery leasing program, like the one offered by Vermont's Green Mountain Power

While an upfront incentive payment is helpful for households interested in installing energy storage, Green Mountain Power's experience demonstrates that a battery leasing program can be even more effective. Under Green Mountain Power's program, home batteries, which can be accessed by the utility during times of high grid need, can be leased from the utility for \$55/month over 10 years.³ While the Vermont utility also offers generous upfront incentives for customers to purchase their own batteries (up to \$10,500), its customer-owned program has enrolled just 2.5 MW compared to 30 MW through the leasing program.⁴ Indeed, the leasing program, which was initially offered with a 500-customer cap on participation, had long waitlists until the cap was lifted by the Vermont Public Utilities Commission in August 2023,⁵ further indicating the popularity of a leasing model over a customer ownership model.

Under a leasing program, PacifiCorp would own the batteries placed in customers' homes, which would make PacifiCorp's proposal to have access to the batteries 24/7 more appropriate. Notably, most other battery incentive programs do not grant the utility 24/7 access to the battery, but rather only during relatively few high-demand periods throughout the year. The Joint Organizations are not currently taking a position on whether it is appropriate for PacifiCorp to

² *Smart Battery Pilot Three-Year Assessment*. Portland General Electric, 25 Oct. 2023, p. 58 (filed in Oregon Public Utilities Commission Docket No. UM 1856).

³ Tesla Powerwall." *Green Mountain Power*, greenmountainpower.com/rebates-programs/home-energy-storage/powerwall/.

⁴ *Id.*

⁵ Niemasz-Cavanagh, Leah. "GMP's Request to Expand Customer Access to Cost-Effective Home Energy Storage through Popular Powerwall and BYOD Battery Programs Is Approved." *Green Mountain Power*, 18 Aug. 2023, greenmountainpower.com/news/gmps-request-to-expand-customer-access-to-cost-effective-home-energy-storage-is-approved/.

have 24/7 access to customers' batteries under WattSmart, particularly if the Company does not own the battery, and may provide additional comment at a later date.

3. Ensure full battery capacity is available to battery owners prior to an anticipated storm or outage event

PacifiCorp is proposing that it will not drain batteries below 10 percent capacity and that dispatch events will be managed to minimize use of the battery system during or prior to an expected outage. The Joint Organizations are concerned that this minimal level of guaranteed battery capacity will not provide battery owners with meaningfully access to energy in the event of an outage. In other words, the customer's battery may not meaningfully increase reliability during an outage event, which could result in customer dissatisfaction. Considering the increasing need to rely on public safety power shut offs to avoid wildfires, providing assurance to customers that if they invest in storage, that storage will be available during an outage is especially important. It's also notable that other utilities, such as PGE, guarantee higher battery capacity levels and ensure that customers have full battery capacity prior to outages. For instance, PGE's SmartBattery pilot allows customers to share up to 80% of their battery's capacity, meaning that 20% is always reserved for the battery owner and, perhaps more importantly, the customer's battery is only controlled by PGE during high demand periods, estimated to be 15 times a year.

PacifiCorp should revise WattSmart to ensure that customers have full capacity prior to an anticipated outage event. This will better incentivize customers to both purchase a home battery and then share its capacity with PacifiCorp, as the customer will be confident in the battery's ability to meet his or her own needs during an outage

Thank you for your consideration of these comments. The Joint Organizations support expanding WattSmart to Oregon customers and believe that the above recommendations can help make WattSmart a success. We are happy to discuss these comments further or answer any questions that the Company may have.

Sincerely,

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