

## Oregon Public Utility Commission – SB 1178 Cost Information

**Question:** How does the PUC think SB 1178 would impact rates?

### Background:

ORS 469A.210(2)(a) requires at least 10 percent of the “aggregate electrical capacity” of large utilities come from small-scale resources or specific types of biomass facility referred to collectively as “SSRs”.

SB 1178 modifies the current SSR goal from a capacity-based standard to an energy-based standard.

Subsection (2) requires that 10 percent of electricity “sold in state” by an electric company is from small scale renewable energy facilities. Further, subsection (2) prohibits utility ownership of any small-scale renewable energy facilities used to meet the 10 percent mandate.

Subsection (4) requires that the electric utility make best efforts to continually increase the annual percentage of energy sold in the state that is purchased from eligible facilities beginning in 2025.

### Response:

We are not able to perform a full rate impact analysis on an expedited timeline, but we were able to provide a rough estimate of the amount that SB 1178 could make PacifiCorp and PGE customer costs increase. We roughly expect that the SB 1178 changes will raise the cost of the SSR requirement to utility customers to more than \$54.6 million every year or more than \$854 million over 20 years (inflation adjusted). This is a bare minimum estimate, and it will likely cost more due to the simplifying assumptions we made. More details on the limitations of our assumptions are below.

	Total	PacifiCorp	PGE
<b>Existing Statute Requirements</b>			
Estimated SSRs required (MW)	1,828	860	968
Estimated additional cost – annual	\$42.8 million	\$20.2 million	\$22.7 million
Estimated additional cost – 20 years (2025 \$)	\$669 million	\$315 million	\$354 million
<b>SB 1178 Incremental Requirements</b>			
Estimated SSRs required (MW)	504	337	167
Estimated additional cost – annual	\$11.8 million	\$7.9 million	\$3.9 million
Estimated additional cost – 20 years (2025 \$)	\$185 million	\$124 million	\$61 million
<b>Total Existing + SB 1178</b>			
Estimated SSRs required (MW)	2,332	1,197	1,135
Estimated additional cost – annual	\$54.6 million	\$28.1 million	\$26.6 million
Estimated additional cost – 20 years (2025 \$)	\$854 million	\$439 million	\$415 million

We estimate that the SSR requirement in ORS 469A.210 already requires PacifiCorp and PGE to own or contract for a total of 1,828 MW of SSR facilities by 2030 – more than 90 20MW facilities. We estimate that this will add a minimum of \$43 million of costs per year to PacifiCorp and PGE customers.

We estimate that the changes in SB 1178 will require an additional 505 MW of SSRs or more than 25 additional 20MW facilities. We estimate that this will add a minimum of \$12 million in costs per year to PacifiCorp and PGE customers.

It may also help to caveat that the energy generated by solar SSRs is not likely to reduce the need to use natural gas and coal used during peak demand hours, meaning customers would likely pay the SSR costs we modeled on top of the more expensive investments needed to meet the HB 2021 requirements.

### **Limitations of this analysis:**

To provide a quick answer to this question, we performed a rough analysis that makes many simplifying assumptions. The estimates we provide are the lowest minimum cost that could be incurred. We expect the cost of the SSR requirements will be higher than this.

Key assumptions include:

- This estimate does not reflect the total cost to purchase this much energy from SSRs. It only measures the difference in cost between purchasing this much energy from solar SSRs instead of purchasing it from large-scale solar.<sup>1</sup> Complex IRP modeling is needed to determine the actual impact that purchasing this much SSR power would have on other utility costs and investments. We could get you a total cost to purchase this much power from SSRs, though.
- This scale of SSR development by 2030 may require utilities to pay price premiums beyond the generic SSR price assumptions we used in this analysis. In addition, our SSR price assumptions do not consider that SSRs may become more costly to build as we add more and more in the state, including costs for:
  - Permitting and siting
  - Land leases
  - Interconnection and transmission costs
  - Impacts to the distribution network
  - Increased battery storage investments
  - Increase curtailment of wind and other renewable energy resources
- Moving to the energy-based standard introduces the risk that SSRs will generate fewer MWhs than expected. The utilities might incur higher costs to create a buffer of extra SSRs to ensure compliance.

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<sup>1</sup> We assume that the 10 percent requirement is met using 20 MW solar facilities where 50% are located in high solar output areas in Eastern Oregon and 50% are located in lower solar output areas in Western Oregon. We used assumptions from PacifiCorp and PGE's integrated resource plans (22.9% capacity factor). The actual costs will be dependent on the resource types and locations used to meet the SSR requirements.

- Our analysis assumes that SSR energy can be fed into batteries and used when demand is higher; however, energy that goes into batteries may not count toward SB 1178. This will depend on what counts “energy sold in Oregon.”
- Prohibiting utility-owned SSRs may disqualify some existing SSRs and increase the amount of additional SSRs required.
- SB 1178 may require the use of renewable energy certificates (RECs) to demonstrate energy sold – we do not include an estimate the incremental cost of purchasing RECs in our analysis