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Public Utility Commission of Oregon Attn: Filing Center 201 High St. SE, Suite 100 P. O. Box 1088 Salem, OR 97308-1088

RE: UM 1758 - Informal Comments on Staff's Draft Solar Incentive Report

These comments are in response to Commission Staff's request for informal feedback to assist in the drafting of the Solar Incentives Report to the legislature, as directed by House Bill 2941 (2015) ("HB2941"). Portland General Electric (PGE or Company) appreciates the work of Staff and finds the comments and recommendations made in the draft report to be reasonable overall. In consideration of recent legislation and the current market landscape, the draft report offers appropriate direction regarding incentivizing effectiveness and efficiency of solar resources in the State of Oregon. The Company recommends the following additional considerations regarding the current draft report:

• The Resource Value of Solar ("RVOS") – as is currently being determined through Docket UM 1716 – provides transparency and fairness to stakeholders through a clearly defined and predictable valuation process.

PGE strongly supports the recommendation of the Commission to adopt a "solar metering program" that utilizes the resource value of solar calculation to properly compensate solar systems within a utility's service territory for the benefit those solar systems provide to the grid. PGE has publicly raised the issue of cost shift caused by the net metering program and has been supportive of the RVOS method as one way to address some of the cost shift. The RVOS values that will establish the compensation level of the solar metering program would have predictable and transparent updates, would provide an inclusive process for stakeholders, and would lead to a compensation mechanism that provides a fair and easy to understand valuation to new solar customers. PGE supports the "grandfathering" provision recommended in the draft report for existing net metering customers.

Page 10 of the Commission draft report describes the cost shift issue in the current net energy metering (NEM) construct, noting: "customers that offset a portion of their monthly usage by producing their own energy end up purchasing less energy from the utility and therefore pay less of the utilities' fixed costs directly." We agree with the draft report. The current construct in Oregon "nets" a customer's bill by providing a per-kWh credit at the full retail rate to customers with a solar photovoltaic (PV) system – this full retail rate includes a utility's infrastructure investments in generation, transmission, and distribution. If a customer is able to "net" at the full retail rate, their contribution to fixed costs would be avoided and would fall to other customers. The RVOS removes this "one size fits all" NEM retail rate, and instead replaces it with one that is time, location, and utility specific. This added specificity ensures that customers with a solar

system are compensated fairly; while non-participating customers are not harmed. We believe this concept improves the fairness of compensating customer-generators for their contribution to the electrical grid.

Staff's recommendation to move away from full-retail net metering and toward a more specific valuation approach is supported by the draft 2016 National Association of Regulatory Utility Commissioners (NARUC) "Manual on Distributed Energy Resources Compensation," which addresses retail rate net energy metering (NEM) as a temporary incentive program. The NARUC manual alludes to NEM as a temporary construct meant to incentivize adoption, saying: "a decision to adopt NEM as the compensation methodology may be appropriate if a regulator decides to incentivize adoption rates of solar PV; however, as adoption rates increase, it may not be necessary to continue to provide such an incentive."¹ This thinking is in line with page 3 of the Draft report, in which it is noted that Oregon's electricity resource diversity has evolved greatly, and the solar industry in Oregon has matured significantly since net metering was instituted in the State in 1999. We agree with both the report and with NARUC on this issue. The reduction in solar PV costs across industry sectors is a direct result of the incentives that have been designed over the last decades to encourage solar PV installation. The US industry is now matured with the millionth PV system being installed in 2016, nearly 12 GW of solar PV being installed in 2015 and showing the third straight year of 20%+ workforce growth.² Indeed, solar PV is now less than 1% of the cost that it was in the late-1970s.³

Clarification/recommendations regarding incentives and above-market costs:

• On page 15 of the draft report, the Commission recommends that

"as the above-market costs of solar have come down, the Energy Trust's use of the public purpose charge (PPC) should be modified to target only solar PV applications that provide unique benefits to the utility system or help to reduce the 'soft costs' of solar energy. Unique benefits to the utility system could include promoting the installation of solar PV systems to help support and improve the utility's electric system through the selected placement of solar arrays to improve system reliability or voltage regulation. Public purpose charge funds could continue to be used for programs designed to reduce 'soft costs' such as permit fees, permitting, sales tax, transaction costs, installer/developer profit, indirect corporate costs, customer acquisition, installation labor, and supply chain costs."

PGE agrees with this recommendation and respectfully suggests the use of a portion of PPC funds to support deployment of PV projects that benefit low-income customers. Alternatively, PGE would recommend low income consideration in future consideration for state incentives as the vast majority of persons who have directly benefitted from solar PV in the state are middle- and upper-income individuals.

 Pages 14-15 describe the Energy Trust's process to fund a portion of the above-market cost of solar projects. The Oregon Administrative Rule (cited by the report) reads that "the portion of the net present value cost of producing power (including fixed and operating costs, delivery, overhead, and profit) from a new renewable energy resource

¹ "NARUC Manual on Distributed Energy Resources Compensation" Prepared by the Staff Subcommittee on Rate Design, 2016. Page 61.

² Q3/Q4 2015 Solar Industry Update, SunShot U.S. Department of Energy, Feldman, Boff, Margolis (January 2016), available at energy.gov/sunshot

³ See, e.g. cleantechnica.com/2016/02/12/is-this-the-best-solar-chart-yet/

that exceeds the market value of an equivalent quantity and distribution (across peak and off-peak periods and seasonality) of power from a non-differentiated source, with the same term of contract." PGE recommends clarifying whether the assumed compensation received from the sale of electricity is at the avoided cost price, renewable avoided cost price, RVOS rate, or retail rate. This clarification is necessary in order to "evaluate the appropriate ramp down period" as recommended in the report on page 16.

Miscellaneous Clarification and Recommendations:

• On page 5 of the draft report, the Commission provides two principles:

- Ratepayers should not subsidize solar PV installations where there are no above-market costs. Owners of solar PV projects should receive compensation that reflects the value of solar to the utility systems and utility ratepayers, including the environmental value of solar generation that helps meet any state and federal carbon emissions mandates.
- Subsidies and incentives aimed at social and economic development benefits such as jobs, health, and environmental quality – should be funded by state taxpayers rather than a narrow class of utility ratepayers.

PGE agrees with these two distinctions, but would ask that the commission consider clarifying these principles regarding the value of renewable energy credit (REC) purchases for the purpose of complying with state renewable portfolio standards (RPS). RPS compliance is a benefit to utility customers for which the utility would otherwise have to comply in a different fashion. The utility can provide compensation for that environmental and compliance value through the RVOS mechanism (in situations where bundled RECs are sold to the utility).

We reiterate our support for the themes expressed in the Commission's draft Solar Incentives report to the legislature, and we express our thanks to Staff for leading an inclusive and collaborative process. We look forward to continued collaboration over the next month.

Sincerely,

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Jay Tinker Director, Regulatory Policy & Affairs