

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF THE STATE OF OREGON**

**UM 1716**

**Testimony**

**PORTLAND GENERAL ELECTRIC COMPANY**

**Cross Response Testimony of**

*Stefan Brown  
Darren Murtaugh*

**July 21, 2016**

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## I. Introduction and Summary

1 **Q. Please state your name and position.**

2 A. My name is Stefan Brown. I am a manager of Regulatory Affairs for Portland General  
3 Electric Company (PGE or Company).

4 My name is Darren Murtaugh. I am the Manager of Transmission and Distribution  
5 Planning and Project Management.

6 **Q. Have you previously testified in this proceeding?**

7 A. Yes, our qualifications are provided in Section V of PGE Exhibit 100.

8 **Q. What is the purpose of your testimony?**

9 A. Our testimony reiterates PGE's overall support for the elements selected by Mr. Olson for  
10 inclusion in the resource value of solar (RVOS) methodology, clarifies PGE's position  
11 regarding the conditional element "Security: Reliability, Resiliency, and Disaster  
12 Recovery," and responds to the reply testimony of other parties in this proceeding.

13 **Q. Has PGE's position on the elements included in the overall methodology to calculate  
14 the RVOS changed since PGE/100?**

15 A. No. PGE maintains that the ten elements that Mr. Olson selected in Staff/200 are reasonable  
16 and in line with the Commission's direction in Order 15-296 to only consider elements that  
17 directly impact the cost of service to utility customers.

18 **Q. In PGE/100, the Company states that while not all data needed for the RVOS  
19 calculation is currently available; the use of hourly marginal costs is generally  
20 acceptable. Does PGE propose any changes to the calculation of any elements?**

21 A. Yes, PGE's proposed modification to the calculation of administration costs is included in  
22 Section III.

## II. Elements

1 **Q. Please describe your understanding of the proposed treatment of the conditional**  
2 **element “Security: Reliability, Resiliency, and Disaster Recovery” as described by Mr.**  
3 **Olson in Staff/200.**

4 A. In Staff/200 Olson/25, Mr. Olson explains that he declined to include “Security: Reliability,  
5 Resiliency, and Disaster Recovery” as an element used to calculate RVOS. He explains this  
6 exclusion, saying that the element “could potentially have value for utility ratepayers...  
7 However, this would depend on solar being deployed in a microgrid application that would  
8 provide electric service to utility ratepayers who do not adopt solar PV.” Further, Mr. Olson  
9 did not include any quantification of potential benefits into the RVOS model due to the  
10 exclusion of the element.

11 **Q. The reply testimony of multiple parties expressed that “Security: Reliability,**  
12 **Resiliency, and Disaster Recovery” could add value to utility customers and should be**  
13 **included in the methodology. Does PGE agree with this view?**

14 A. No. PGE shares the view expressed in Staff/200 Olson/25 that the benefits associated with  
15 this element are only realized in a situation where a microgrid exists. Distributed solar in  
16 isolation does not provide a direct reliability benefit to the distribution system or to utility  
17 customers and, therefore, should not be included in the calculation of the RVOS. As noted  
18 by Mr. Olson, microgrid systems are generally very costly, and there are no known customer  
19 microgrid systems in the state of Oregon currently.

1 **Q. In the reply testimony of Renewable Northwest, the Oregon Solar Energy Industries**  
2 **Association, the NW Energy Coalition, and Northwest Sustainable Energy for**  
3 **Economic Development, Witness O'Brien mentions (RNW, OSEIA, NWEA,**  
4 **NWSEED/100; O'Brien/6) that "the value of ancillary and support services from**  
5 **distributed solar is not at all limited to microgrid applications." Does PGE**  
6 **acknowledge that there are reliability/resiliency benefits outside of a microgrid?**

7 A. PGE does acknowledge that while distributed solar in isolation does not provide a direct  
8 reliability benefit to customers, it may be a component of a reliability solution. That is,  
9 distributed solar is an important part of microgrids and off-grid systems that could  
10 potentially improve reliability. This reliability improvement would most likely be seen  
11 through improved System Average Interruption Duration Index (SAIDI) statistics.  
12 However, because distributed solar does not have intrinsic system reliability value in  
13 isolation, we do not believe that a contribution to reliability should be captured in the RVOS  
14 calculation.

### III. Methodology

1 **Q. In Staff/200 Olson/33, what is the proposed calculation for valuing administration**  
2 **costs?**

3 A. Mr. Olson details the proposed calculation for administration costs as follows:

4 “\$/MWh value provided by utility that represents the cost of interconnecting solar  
5 generators and any ongoing administrative costs such as billing. This value is  
6 uniform across all hours of the year.”

7 **Q. How does PGE define “ongoing administrative costs”?**

8 A. We take “ongoing administrative costs” to mean the cost of maintaining customer  
9 relationships, including handling customer communications, measuring usage, maintaining  
10 records, and billing.

11 **Q. Does PGE propose any changes to the valuation of administration costs?**

12 A. Yes. Since the cost of administration would be the same across all hours of the year (as  
13 noted in Staff 200 Olson/33), PGE proposes calculating the cost based on the number of  
14 customers that are interconnected, rather than the amount of total energy being  
15 interconnected. The *number* of customers interconnected is much more highly correlated  
16 with customer costs than the total amount of energy.

17 **Q. Does PGE propose a calculation method to determine this cost?**

18 A. Yes. We propose using the customer marginal cost from the most recent filed rate case as a  
19 basis, and then allocating costs resulting from solar interconnection to the customers with  
20 solar installations.

1 **Q. How would adopting a customer-based valuation (rather than an energy-based**  
2 **valuation) lead to a more accurate value for this element?**

3 A. The utility cost for this element is highly dependent on the number of solar customers that  
4 are interconnected. Further, this proposed change would bring the calculation methodology  
5 into line with how PGE calculates customer administration costs for other classes. If we are  
6 able to align the calculation of administration costs associated with solar closely with the  
7 customer marginal cost, there will be a stronger correlation between cost allocation and cost  
8 causation.

9 **Q. Does this conclude your testimony?**

10 A. Yes.