



**Portland General Electric Company**  
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July 16, 2013

**Via Email**

puc.filingcenter@state.or.us

OPUC Filing Center  
550 Capitol Street, N.E., Ste 215  
PO Box 2148  
Salem, OR 97308-2148

**RE: UM 1657 PGE Reply Comments**

Attention: Filing Center

Enclosed for filing in Docket No. UM 1657 is Portland General Electric's Reply Comment. This document is being filed by electronic mail with the Filing Center.

If you have any questions or require further information, please call Spenser Williams at (503) 464-7490. Please direct all formal correspondence and requests to the following email address: pge.opuc.filings@pgn.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patrick G. Hager".

Patrick G. Hager  
Manager, Regulatory Affairs

cc: UM 1657 Service List  
Wendy Gerlitz, NWECC

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**UM 1657**

In the Matter of

PORTLAND GENERAL ELECTRIC  
COMPANY

Annual Smart Grid Report

REPLY COMMENTS OF PORTLAND  
GENERAL ELECTRIC

Pursuant to the June 21, 2013, OPUC Staff Memorandum issued in this docket, Portland General Electric (PGE) submits these comments in response to comments submitted by the NW Energy Coalition (NVEC) and Citizens' Utility Board of Oregon (CUB). We greatly appreciate their input and look forward to continued collaborative efforts supporting Smart Grid development in Oregon.

**Response to NVEC Comments**

**A. Smart Grid & Energy Efficiency (EE) Interactions**

PGE agrees that the "Smart Grid" will offer opportunities to enhance EE efforts. For example, Energy Tracker currently offers customers energy saving tips as well as direct links to related Energy Trust of Oregon (ETO) programs in addition to access to their smart meter data. As PGE and the ETO work together to encourage more behaviorally-driven EE, future enhancements to Energy Tracker will continue seeking opportunities to support those efforts. Additionally, PGE's participation in "Green Button" will allow customers to have their usage data exported directly to authorized third parties for customized energy analyses.

The Smart Grid report also describes PGE's initiatives in the area of Smart Appliances. While PGE's primary focus will be on Demand Response, we recognize that Smart Appliances

will likely be highly efficient appliances. We have been collaborating with the ETO and Northwest Energy Efficiency Alliance (NEEA) on how best to coordinate our efforts in Smart Water Heating. As mentioned in the report, promoting Smart Thermostats and HVAC controls will likely be a future joint initiative with the ETO.

**B. Low Income Consumer Protection**

PGE recognizes NWEA's concerns that Smart Grid technologies could be used in ways that have adverse effects on low income customers. The two concerns cited – automated shutoff function and time-of-use pricing programs, were vetted extensively in Docket No. UE 189. If similar concerns arise in conjunction with other Smart Grid initiatives we will address them at the time we seek approval to advance them.

**C. Vehicle 2 Grid**

Based on NWEA's comments during the Smart Grid workshop, PGE revised this section of the report to look farther into the future. An extensive number of Electric Vehicle (EV) related projects are proposed in the R&D section, including a Vehicle 2 Home project. PGE's leadership position in EVs has resulted in a close working relationship with major vehicle and charging station manufacturers that has guided our planning efforts. We believe that the proposed research and timing of PGE's initiatives in this area are appropriate.

**Response to CUB Comments**

**A. Proposed AMI Conditions in UE 189**

Many of the comments submitted by CUB were related to prospective uses of the AMI system to enable Smart Grid capabilities. PGE would like to note that, pursuant to Commission Order No. 08-245, stipulating parties (OPUC Staff, CAPO, ODOE, and NW Natural) agreed to PGE proceeding with the implementation of AMI subject to proposed AMI Conditions. In

October 2011, OPUC Staff filed an AMI Audit Report reviewing the stipulated AMI Conditions. At that time PGE had a few remaining conditions noted as “in-progress.” As of Q2 2012, PGE has completed all the proposed AMI Conditions.

Based on CUB’s feedback during the Smart Grid workshop, PGE updated the status of a number of AMI-related Smart Grid benefits that have been captured as part of the AMI deployment. Per CUB’s comments, the last bulleted statement on page 10, section 2.1 of PGE’s Smart Grid Report indicates that PGE has built systems that utilize Smart Grid data to identify overloaded transformers and confirm outages prior to dispatching crews. On page 11, section 2.2.1, we indicate that the Outage Management System we are installing will use near real-time information from our Smart Meters to obviate the need for customer calls to detect outages, track restoration efforts and save time and money in dispatching line crews.

On page two of their comments, CUB refers to “PGE’s Distribution Asset Utilization and Outage Management” projects (Proposed AMI Conditions 4 and 5). These projects are in-progress and are a part of PGE’s 2020 Vision. We continue to evaluate use of the two-way communications system for load control purposes. The market for load control via smart devices/appliances is still evolving. If the two-way communication system deployed for AMI is identified as the most cost-effective means of communicating with those devices, we will work with our vendor to build those capabilities. However, it is premature to commit to developing these capabilities until we have a better sense of the communications needs and other options being developed to communicate with end-use devices. Most smart appliances available today have control access via the Internet and developing this capability is PGE’s first effort as a communication method.

CUB's comments noted that PGE did not provide details for a program that would directly control air conditioning (A/C) loads. Past research has convinced us that, in our service territory, Smart Water Heaters are the most attractive opportunity for load control. Water heater load control would be the least intrusive from a customer perspective and could also offer thermal storage capability. We realize that with advances in smart thermostats and the possible proliferation of In-Home Energy Management systems, that A/C load control may become an attractive opportunity. If so, we will pursue it. A more extensive discussion can be found on page 21 of the Smart Grid report in section 3.2.2.5.

**B. Linking the Past to the Future**

In response to CUB's comments, during the Smart Grid workshop, PGE edited the report to explicitly identify the status of several potential uses of the AMI infrastructure to enable smart grid capabilities. We did not interpret the UM 1460 reporting guidelines to require a detailed treatment of how prospective applications may differ from testimony provided in 2007.

**C. Smart Grid, Energy Efficiency & Demand Response**

As noted in our response to NWECC's comments, PGE agrees that the Smart Grid will enable more EE in new and innovative ways. PGE acknowledges the contributions of many EE measures to ongoing demand reductions and has attempted to capture those contributions in our Integrated Resource Plan. As stated in our response to NWECC's comments, we also recognize that Smart Appliances will likely be highly efficient appliances. We have been collaborating with the ETO and NEEA on how best to coordinate our efforts in Smart Water Heating. As mentioned in the report, promoting Smart Thermostats and HVAC controls will likely be a future joint initiative with the ETO.

DATED this 16<sup>th</sup> day of July, 2013.

Respectfully submitted,



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