



NW Energy Coalition

for a clean and affordable energy future

April 22, 2015

To: Spenser Williams, Regulatory Affairs Analyst
Portland General Electric Co.

Re: PGE 2015 Smart Grid Report

The NW Energy Coalition (Coalition) appreciates the opportunity to provide comments on the draft PGE 2015 Smart Grid Report.

Overall, we think the draft report is quite comprehensive and readable. PGE has assembled an impressive range of grid optimization initiatives and, importantly, has already moved many of them from concept into development, and some to completion.

We will not respond directly here to many of the details in the report but look forward to further discussions and to the initial outputs later this year of the expert task force working on the proposed future grid state and road map.

Low Income Participation. A key concern of the Coalition is to insure that low income and fixed income residential customers have access to and gain benefits from the smart grid effort; after all, they provide a considerable fraction of the financial resources for these initiatives through their bills. This will be particularly important as PGE moves from early pilots to program rollouts. Pricing programs should accommodate the particular concerns in this segment, measures such as programmable thermostat demand response should be structured to respond to cost barriers and, for renters, the split incentive question, and customer information and education is key.

We are pleased to note that some aspects of the report already address these issues. For example, the report notes: "To help ensure that PGE's low-income customers are aware of the Energy Tracker tool, PGE has provided information and demonstrations to the Community Action Agencies (CAAs) that serve our customers at our semiannual meetings."

Elsewhere, the report notes studies showing varying impacts of dynamic pricing on low income customers, and so forth. Continued attention to these questions is important to insure the smart grid effort achieves its potential and treats all customers fairly.

Advocates for the West
Affiliated Tribes of Northwest Indians
AirWorks, Inc.
Alaska Housing Finance Corporation
Alliance to Save Energy
Alternative Energy Resources Organization
American Rivers
A World Institute for a Sustainable Humanity
BlueGreen Alliance
Bonneville Environmental Foundation
Centerstone
Citizens' Utility Board of Oregon
City of Ashland
City of Seattle Office of Sustainability & Environment
Clackamas County Weatherization
Clean Energy Works Oregon
Climate Solutions
Community Action Center
Community Action Partnership Assoc. of Idaho
Community Action Partnership of Oregon
David Suzuki Foundation
Earth and Spirit Council
Earth Ministry
Ecova
eFormative Options
Emerald People's Utility District
EnergySavvy
Energy Trust of Oregon
Environment Oregon
Environment Washington
HEAT Oregon
Home Performance Guild of Oregon
Home Performance Washington
Housing and Comm. Services Agency of Lane Co.
Human Resources Council, District XI
Idaho Clean Energy Association
Idaho Conservation League
Idaho Rivers United
Interfaith Network for Earth Concerns
League of Women Voters Idaho
League of Women Voters Oregon
League of Women Voters Washington
Montana Audubon
Montana Environmental Information Center
Montana Renewable Energy Association
Montana River Action
National Center for Appropriate Technology
Natural Resources Defense Council
New Buildings Institute
Northern Plains Resource Council
Northwest Energy Efficiency Council
NW Natural
NW SEED
OneEnergy Renewables
One PacificCoast Bank
Opower
Opportunities Industrialization Center of WA
Opportunity Council
Oregon Energy Coordinators Association
Oregon Environmental Council
Oregonians for Renewable Energy Policy
Pacific Energy Innovation Association
Pacific NW Regional Council of Carpenters
Portland Energy Conservation Inc.
Portland General Electric
Puget Sound Advocates for Retired Action
Puget Sound Cooperative Credit Union
Puget Sound Energy
Renewable Northwest Project
Save Our wild Salmon
Sea Breeze Power Corp.
Seattle Audubon Society
Seattle City Light
Seinergy
Shoreline Community College
Sierra Club
Sierra Club, Idaho Chapter
Sierra Club, Montana Chapter
Sierra Club, Washington Chapter
Smart Grid Northwest
Snake River Alliance
Solar Installers of Washington
Solar Oregon
Solar Washington
South Central Community Action Partnership
Southeast Idaho Community Action Partners
Spokane Neighborhood Action Partners
Student Advocates for Valuing the Environment
Sustainable Connections
The Climate Trust
The Energy Project
The Policy Institute
Trout Unlimited
Union Of Concerned Scientists
United Steelworkers of America, District 12
US Green Building Council, Idaho Chapter
Washington Environmental Council
Washington Local Energy Alliance
Washington State Department of Commerce
Washington State University Energy Program
YMCA Earth Service Corps

In this regard, we also suggest caution about one particular possibility in Section 7 on future potential programs, on prepaid metering (p. 37). This also has other ramifications, particularly for customer account management as is now being discussed by the Oregon PUC on proposals to modify shutoff policy.

Smart Grid Maturity Model. We think PGE is following the right approach by using the SGMM for concepts and guidance, rather than a rigid development framework. This also provides an important future capability for benchmarking program concepts, designs and implementation alongside other SGMM utilities.

Comparative Analysis. We appreciate the attention paid to comparative analysis of measures and programs under the smart grid umbrella. The summary of other utility studies and meta-evaluation in the March 4 slides is very informative about the issues and lessons learned from other parts of the country, specifically on peak and TOU pricing programs. Continued review of these kinds of studies will be helpful in shaping the direction of the PGE smart grid effort.

Future Projects (Section 6). We thank PGE for the very helpful summary of potential future projects in this section. It would be helpful to add a short description of the approach PGE is using to identify and screen these future options, and expect this will be a substantial part of the discussion of the draft road map coming later this year. We realize there are going to be complex factors involved in program design and in the sequencing and tradeoffs between program areas, but key elements include potential overall impact, market acceptance and barriers, cost efficiency, and ramp time and saturation.

Smart Water Heaters pilot (p. 36). We would like to highlight the potential importance of the water heater sector as one with wide diffusion in PGE service territory in all customer segments and with significant potential for both incremental and decremental demand response.

Energy Storage. If there is one area we believe the PGE smart grid effort currently undershoots, it is energy storage. Realizing that this covers a very diverse range of technologies, roles within the power system, costs, readiness, etc., we hope this general category will get a higher level of attention and a more comprehensive strategy going forward. In addition to the demonstrated value of distribution-side storage for ancillary services highlighted by the Salem Smart Power Project, the role of storage in leveraging additional value at the grid edge is going to be highly important, including the three-way interaction of storage, distributed energy resources such as rooftop solar and dispatchable water heaters, and power electronics.

Electric Vehicles. PGE rightly prides itself on taking a leading role in the smart grid/electric vehicle context. It is noteworthy that the report does not lump everything together as “V2G,” but rather lays out potential future RD&D and pilot development in multiple areas, including timed charging, vehicle-to-home, vehicle-to-grid, and second-life-battery.

Overloaded Transformer Analysis (p. 16). The description that analysis of metering data has identified 449 overloaded transformers. While the analysis is now complete, it would be helpful to add what additional steps the company plans to take to address these system elements.

Reliability Metrics (Appendix 7). Given that additional development is occurring for the metrics reporting framework, we note that at the recent metrics workshop we suggested limited additional breakouts for the main reliability metrics by geography (for example, east and west Portland, Salem, other areas) and customer type (residential, commercial, industrial), in order to identify any additional important high level trends in system reliability.

Thank you for your consideration of NW Energy Coalition's comments.

A handwritten signature in black ink, appearing to read "Fred Heutte". The signature is written in a cursive, slightly slanted style.

Fred Heutte
Senior Policy Associate