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NW Energy Coalition
for a clean and affordable energy future

Public Utility Commission of Oregon
550 Capital Street NE
Salem, OR 97301@

VIA E-MAIL: Brittany.andrus@state.or.us

September 9, 2013

RE: UM1667 Comments on PGE Smart Grid Report

Dear PUC Staff:

The NW Energy Coalition (Coalition) offers the following comments on Pacificorp's ("the Company") first Smart Grid Report pursuant to UM 1460 and UM 1667. The Coalition participated in the workshop on this topic held on June 11, 2013 and submitted comments to the Company prior to their final report filing with the Commission.

Overall, the report would benefit from a more cohesive discussion of PacifiCorp's strategy, goals and objectives for eventual smart grid implementation. The current report reads as a thorough, but very generic description of smart grid components and a collection of current Company efforts, followed by a discussion, in very general terms, of the cost/benefit analysis conducted by the Company regarding future smart grid efforts.

The Company should expand the section regarding the cost/benefit analysis and include more information about the future "expected roadmap" or specific implementation plans. It should also produce clearer material about what the Company is currently doing and what the Company plans to do over the next 5-year timeframe. As an example, the final section of the report alludes to future pilot projects, but the text of the document gives the reader no idea as to what type of pilot projects Pacificorp might be considering.

The report clearly demonstrates that Pacificorp has decided not to take a leadership position on Smart Grid, but instead prefers to follow along in the footsteps of well-documented, tried and true approaches. While we appreciate this conservative position, the Company is dismissing early implementation of several promising aspects of Smart Grid applications.

811 1st Ave. #305, Seattle, WA 98104
503-449-0009 • wendy@nwenergy.org
www.nwenergy.org

The Company's report states *"Technologies included in the study but not considered in the financial analysis include fully redundant ("selfhealing") distribution systems, distributed energy systems (including electric vehicles) and direct load control programs. The Company will continue to explore these technologies and will include them in future analyses when their benefits become more mainstream and quantifiable"* (page 11). Several aspects of both distributed energy systems and direct load control programs may offer immediate benefits to the Company that warrant closer consideration. We are unconvinced by the Company's arguments that these elements are not worth pursuing at this time.

The following recommendations offer specific ideas for strengthening the report.

Demand Response, Customer Education & Distributed Generation
Sections of the report covering Demand Response, Customer Education/Engagement and Distribution Generation do not provide sufficient information to understand what PacifiCorp is currently doing in these areas, what they plan to do over the next few years, and other future implementation efforts. For example, what is the Company's overall strategy for customer engagement in different elements of smart grid infrastructure? This would include a description of the path forward, the steps it would take to get there, and what it would look like once goals are accomplished.

Plug-In Electric Vehicles
The report does not give any information about the anticipated rates of EV penetration in the utility's service area, nor does it provide information about potential interactions between EV owners and PacifiCorp to encourage the charging of EV's in a manner that reduces peak demand in the Company's service territories. Recent evidence from California shows that EV charging can be effective in reducing day/evening time peak loads. PacifiCorp, at a minimum, should consider what it could do in the near term to educate and inform EV owners about the potential for off-peak charging.

Vehicle To Grid
PacifiCorp's report essentially dismisses vehicle to grid implementation in the near future. The concept of manufacturer concerns about battery life is well circulated among smart grid circles, but perhaps not as well documented by research and actual technical information. Indeed, a recent pilot project and associated research contradicts this often-repeated myth. The University of Delaware, NRG Energy and the PJM RTO are pioneering a project to use charging EVs to provide two-way frequency regulation services. In the Delaware project, each car is equipped with some additional circuitry and a battery charger that operates in two directions. These cars earn about $5 a day, or about $1,800 a year in incentives. (For more information see: http://www.nytimes.com/2013/04/26/business/energy-environment/electric-vehicles-begin-to-earn-money-from-the-grid.html?partner=rss&emc=rss&_r=1&)

Vehicle to grid experimentation is already taking place with successful results and car manufacturers recognize the benefits, both in terms of the benefits to the customer to offset the price paid for an electric vehicle and larger benefits associated with the integration of renewables and the greening of our electric system. We also understand that some battery and vehicle manufacturers are looking into bundling of used EV batteries into distributed storage units that support integration. This is a potential area for future evaluation and consideration.

EV technology is progressing rapidly -- new developments are made on a frequent basis. We fear that PacifiCorp is closing the door on a promising potential application that may mature faster than anticipated and could be widely embraced by customers. The Coalition encourages keeping the door open for positive developments that might make pilot projects involving vehicle to grid applications a reality within the planning horizon.

Cost/Benefit Analysis
The discussion of the cost/benefit analysis conducted by PacifiCorp lacks sufficient detail to be useful in understanding the resulting decisions. We encourage PacifiCorp to include more information in the public report, including inputs, assumptions, and actual results.

Low Income Consumer Protection
Across the country, low income advocates and consumer protection groups have raised concerns regarding specific smart grid applications and investments. For example, automatic shut-off functions of automated metering technology and the impacts on low-income consumers are one area of concern. Another area of concern is time-of-use pricing.

The PacifiCorp smart grid report does not address these concerns. The Coalition strongly encourages the Company to review and revise the draft report to incorporate potential areas of concern for low-income consumers and to detail PacifiCorp's efforts to ensure that all customers benefit from smart grid investments.

Thank you again for providing this opportunity to comment on PacifiCorp's draft Smart Grid Report. Please do not hesitate to contact me with any questions or to further discuss any of the recommendations contained herein. The Coalition looks forward to working with the Company and supporting your continuing innovative approaches in this area.

Sincerely,

/s/ Wendy Gerlitz

Wendy Gerlitz
Senior Policy Associate

cc. Brittany Andrus, Oregon Public Utility Commission