Oregon Public Utility Commission Staff Comments on NWPCC May 16, Issue Paper: Demand Response Advisory Committee Scope

The Oregon Public Utility Commission staff appreciates the opportunity to comment on NWPCC May 16, 2016, Issue Paper: Demand Response Advisory Committee Scope. Staff commends the Power Council's work to advance the utilization of demand response especially the creation of a Demand Response Advisory Committee (DRAC) which is hosted and coordinated by the NWPCC for the purpose of exploring demand response implementation, barriers and supply curve development. Demand response is a viable resource capable of offering many grid services and products which utilities can reliably use to help balance demand and supply while keeping service costs low.

1. Clear Goals and DRAC Participant Resource Contribution

The DRAC should be a defined working group with clear goals and developed strategies to reach these goals. Initial DRAC meetings should focus on the development of the workgroups goals.

Additionally, resources should be brought to bear to reach the identified goals through clearly articulated tasks. These resources should be a combination of NWPCC resources and contributions from participating DRAC entities. As a condition of DRAC participation entities should be willing to leverage resources to advance the stated focus of the DRAC: demand response implementation, barrier identification and removal, supply curve development and the stated DRAC scope (A) – (G). Resources should include funding for tool and methodology development.

2. Defining Demand Response

A necessary first step in the DRAC work is to define demand response as a product, the functional roles needed to deliver the product, and the services provided by the resource. This will also help to define the scope the DRAC's work. An expansive or overly inclusive definition of demand response may make the work of the DRAC untenable. It seems proper to allow the DRAC to have a demand response focus and allow the System Integration Forum to tackle the more broadly defined issued raised in the May 16, 2016, *Issue Paper* the Council which notes that, "...there is a need to evaluate alternatives. Some of these alternatives include energy storage (distribution and utility scale), distribution generation (renewable and not), smart grid, and transactive energy." For example, smart grid is a broadly defined term which includes demand response as a resource or resource strategy. Additionally, transactive energy is a conceptual model for grid operation and asset utilization.

3. Tool development: Avoided Cost and Load Impact Protocols

The primary focus of the DRAC work should be methodology and tool development. Similar to energy efficiency resources, demand response resources will be developed by leveraging demand side customer

participation and engagement. Just as the Council has led the region in modeling and identifying the value of energy efficiency the Power Council should undertake similar work to develop avoided cost methodologies for demand response. However, unlike energy efficiency, demand response's grid impacts are both temporal and locational. Staff therefore suggests that the DRAC work on the development of load impact protocols and methodologies to identify and value components of avoid costs.

California has led this work and has a demand response load impact protocol. These protocols attempt to assess the locational value of a demand response resource. While the load impact protocols developed by the California PUC are highly influenced by the California Independent System Operator's Locational Marginal Price (LMP) a DRAC developed load impact protocol would be utility operation specific. For example, suppose BPA was experiencing transmission constraints during peak load hours serving demand in eastern Idaho. The value of demand response in Idaho Falls would greater to BPA then demand response in Salem, Oregon. Additionally these values may be further influenced and may change throughout the hours of the day. It should be noted the Energy Imbalance Market does currently produce LMPs. The region may become more familiar with LMP prices as it collectively explores joining the California Independent System Operator (CAISO). This market explicitly values demand response under Federal Energy Regulatory Commission rules and CAISO filed tariffs.

Undertaking an avoided cost methodology development, especially in a regional forum will further assist the region develop common definitions and understanding of demand response resources, products and services as it will force development of a common lexicon. The combination of both efforts will lead to improved incorporation of demand response resources in utility long-term planning efforts as well as specific demand response program design and evaluation.

4. EM&V

The Power Council, through the work done by Council Staff at the Regional Technical Forum, has become a national example of standard practice development for energy efficiency. This same knowledge and collective standard practice development should be developed by the DRAC for demand response.

Measurement and verification practices are no less important for demand response then for energy efficiency and having a regional forum for the development of EM&V best practices will assuredly provide dividends to the Council, BPA and the regions many load serving entities. Again, California provides an early example of standard measurement and verification practices for demand response which the DRAC can leverage to inform the development of a similar tool set here in the Northwest.

5. Demand Response Program Development

The DRAC should be used as a forum for shared demand response program development. While not all demand response programs will be similarly usable or valued across the regions, many different utility systems share lessons learned. Shared program structures will help inform demand response experts of

viable program structures, program roll-outs and program values. To this end the DRAC should work with the region's utilities and BPA on a common set of program structures or program commonalities that can better define prudent, best practices, program structures, offerings and utilization. This work will also help the DRAC understand how best to understand and leverage technology development trends.

The Oregon Public Utility Commission Staff thanks the Power Council for their work on demand response and wishes to support these efforts. For questions or concerns please contact: Jason R. Salmi Klotz – 503-378-6667 or <u>Jason.klotz@state.or.us</u>.