



**CAISO's Flexible Resource Adequacy and Must Offer Obligation Phase 2
September 26 Working Group Meeting
Public Generating Pool Comments
October 10, 2017**

Public Generating Pool (PGP) appreciates the opportunity to comment on the California ISO's Flexible Resource Adequacy and Must Offer Obligation Phase 2 (FRACMOO2) Working Group Meeting on September 26, 2017. PGP represents ten consumer-owned utilities in Oregon and Washington that own more than 6,000 MW of generation, 96% of which is carbon-free.

Overview

PGP is encouraged by the analysis and the conceptual product framework provided by the ISO at the August and September Working Group meetings of the FRACMOO 2 process. With the continued growth in renewable penetration, the ISO appears to be stretching the capability of its market design to meet the reliability needs of its Balancing Authority Area. In seeking to identify its flexibility needs and then establishing procurement of flexible resources to meet those needs as part of the FRACMOO 2 process, the ISO appears to be undertaking a very appropriate approach to addressing the limitations of its current market design. PGP strongly supports this direction.

As the ISO moves to procure flexible resources to meet its reliability needs, PGP encourages the ISO to:

- Conduct further analysis to support and shape the product concepts
- Maintain and further define product concepts that align with market dispatch intervals
- Ensure products concepts allow for the participation of external resources
- Pursue timely actions to ensure appropriate flexible capacity is to the ISO

Additionally, it is important the ISO employ urgency in addressing the long-term Flexible Resource Adequacy solution and other actions that ensure that there are no gaps in access to resource flexibility in the day-ahead and real-time market. This will become increasingly important as the ISO's flexibility needs continue to grow and outpace what the ISO has forecasted.

Conduct further analysis to support and shape product concepts

The historic data analysis provided by the ISO defining the load following and uncertainty through the different time steps makes it clear that the current tools and market mechanisms available to the ISO to access flexible resource adequacy are not sufficient to address the needs of the system. PGP recommends that the ISO continue the data analysis to illustrate how the flexible capacity needs would be allocated to the different product concepts presented in the

Working Group material. Further, PGP believes it could be useful to use existing Effective Flexibility Capacity determinations to assess how well the existing fleet of resources meets the estimated needs under the conceptual product design.

During the August Working Group meeting, it was announced that the Brattle Group would help inform the ISO's work in this process, but it is unclear to what extent this has occurred. PGP would appreciate clarification on the timing and role of the Brattle analysis.

Maintain and further define product concepts that align with market dispatch intervals

PGP supports the product concepts outlined in the Working Group meeting material. By aligning with existing market dispatch intervals, the ISO will have meaningful access to flexibility while also sending the appropriate price signals and opportunities to resources. Further, this approach will require a different and more granular definition of need that will assure the appropriate level of flexibility is made available to meet the needs of the system. PGP recognizes that the products provided were conceptual, but strongly encourages that further development of the products maintain this proposed consistency with market dispatch intervals. The alignment with market dispatch intervals ensures the commitment of resources is consistent with their performance capability and provides the opportunity to co-optimize with other products.

Ensure product concepts allow for the participation of external resources

PGP has followed the FRACMOO 2 process since the Issue Paper was released in July 2015 in which the ISO was to, consistent with FERC's directive, assess the feasibility of import resources in providing Flexible Resource Adequacy. PGP is disappointed by the limited progress made to date on this issue given the potential benefits that could be realized by creating the opportunity for import resources to be eligible for providing flexibility into the ISO¹. As PGP has commented previously, up until this point, the ISO has not provided a clear path and timeline for expanding the eligibility to include imports in the Flexible Resource Adequacy program nor has the ISO explained why the inclusion of imports is infeasible. For that reason, we believe that any considerations in this effort must include eligibility for external resources.

Despite a lack of progress on making Flexible Resource Adequacy accessible to external resources, PGP is encouraged by and supports the conceptual criteria that external resources would be eligible for the day-ahead and 15-minute dispatchable product. PGP suggests that external resources should be eligible for the 5-minute dispatchable product as well, as long as they have Dynamic Transfer Capability to support their participation.

Pursue timely actions to ensure appropriate flexible capacity is available to the ISO

PGP is concerned about the increasing need for within-hour flexibility on the California ISO system. The current Flexible Resource Adequacy product requirements and the current market design does not provide the ISO with the tools or access to the type of flexibility needed.

Absent these tools, the only reliable option is to increase the amount of costly 4-second responsive regulation reserves on the system, which is costly.

It is important that the ISO have reliable options to meet its flexibility needs because we all operate in an interconnected system. Without a reliable option, the ISO will depend on voluntary EIM offers or inadvertent interchange. The material provided in the August and September Working Group meetings highlight that the ISO is systematically leaning on other Balancing Authority Areas during the evening ramp. PGP recognizes that inadvertent interchange is part of operating in an integrated system; however, the pattern of leaning during the evening ramp indicates that the ISO does not have access to sufficient flexibility during that time period. Given the potential reliability implications and the growing flexibility needs of the system, PGP believes timely action is required to address the need for access to the appropriate flexible capacity.

In closing, PGP has recommended the inclusion of a Day-Ahead Flexible Capacity product in the ISO 2018 Stakeholder Catalog Initiative Processⁱⁱ. Although the product PGP has proposed would be part of the current ISO market design and not a Resource Adequacy product, the product is consistent with and complementary to the Flexible Resource Adequacy concepts outlined in the Working Group material. Development and implementation of a Day-Ahead Flexible Capacity product could benefit the evolution of the Flexible Resource Adequacy products by providing data on how much flexible capacity is needed and may be available on a day-ahead basis.

ⁱ [PGP Presentation on NW Hydro and California](#)

ⁱⁱ [PGP 9/15/17 Submission to ISO Policy Initiatives Catalog Process](#)