

Regional Integration and EIM GHG Compliance Attribution Accuracy Report Demonstration

Public Generating Pool Comments December 18, 2017

Public Generating Pool (PGP) appreciates the opportunity to comment on the California ISO's Regional and EIM GHG Compliance Attribution Accuracy Report Demonstration. PGP represents ten consumerowned utilities in Oregon and Washington that own more than 6,000 MW of generation, 96% of which is carbon-free. Three of the PGP members operate their own Balancing Authority Area (BAA), while six of the members have service territories within the Bonneville Power Administration's (BPA) BAA and one member is in the Avista BAA.

PGP members are not currently participants in the EIM. However, BPA and other BAAs continue to evaluate the costs and benefits of EIM participation. For PGP, a key consideration for ISO and EIM market participation is evaluation of the role that market rules play in proper price formation and equitable treatment of resources both within the market footprint and outside the footprint.

One-Pass Solution results in improper dispatch and price formation

PGP supported the two-pass solution proposed in the Draft Final EIM GHG Enhancement Proposal dated June 26, 2017. Of concern to PGP was the potential for the features of EIM to be used to avoid carbon compliance or to facilitate bilateral transactions that would not occur outside of the EIM.

The analysis of the two-pass solution conducted by the ISO and Brattle indicates that the current one-pass EIM algorithm results in improper price formation and inequitable treatment of resources.

- Inequitable treatment of resources: The current one-pass algorithm creates an opportunity for thermal resources outside of California to use the EIM to effectuate bilateral transactions that could not happen without the EIM, which is outside the design and intent of the EIM. Specifically, EIM entities with thermal and hydro generation outside of California are able to combine free, as available transmission within the EIM with the ability to "deem delivered" zero-carbon resources to California and then transfer energy from non-California thermal resources to serve their load. This transaction would not likely happen without the EIM and does not advance more efficient dispatch of resources. It simply facilitates resource shuffling to the detriment of California in-state thermal generation and overall emissions.
- Improper price formation: The shuffling of transactions impacts the LMP at the point at which the zero-carbon hydro import is delivered. As entities with more hydro resources join the EIM and that hydro is deemed delivered to California at the same point, the amount of hydro being deemed delivered has a direct impact on the GHG shadow price. Specifically, if deemed deliveries of zero-carbon resources are in excess of transmission capability, the GHG shadow price drops to zero. This is appropriate for actual bids to serve imbalance needs, but is not proper price formation if it is the result of resource shuffling.

For these reasons, maintaining the status quo is not an acceptable option. The ISO has suggested that the emissions impact of maintaining the one-pass approach is not significant and, therefore, is considering no change to the algorithm. PGP believes that this logic is not compelling for a couple of reasons. As more entities with hydro resources join the EIM, the emissions impact of back-filling the hydro resources deemed delivered to California with increased gas and coal could grow. Further, improper dispatch and price formation result in unintended consequences that can negatively impact market participants and undermines strong market design.

Hurdle Rate advantages some resources over others

PGP does not believe the hurdle rate is an appropriate solution for EIM GHG accounting. A hurdle rate solution is challenging when applied to different resources. The default emission rate will always be higher than the cost of some resource and lower than the cost of other resources, which provides benefit to specific resource types. For example, a coal-fired resource can benefit from a hurdle rate when the cost of that resource is higher than the hurdle rate, while a lower-emitting resource would be disadvantaged.

Move Forward with Two-Pass Solution

PGP does not believe that the potential for modified bidding behavior has a high enough potential to warrant a change from the two-pass approach recommended by the ISO. Based on presentations and discussions from EIM entities, LMPs are difficult to predict and the risk associated with trying to accurately bid between the first pass and second pass results is high relative to the potential benefit. As such, we would recommend that the ISO move forward with implementation of the two-pass solution as planned.

If the ISO decides not to move forward with the two-pass approach, PGP is open to other concepts the ISO might develop that would address the issue, given the solution results in a more accurate dispatch and prices than the current one-pass approach. PGP encourages the ISO to explore the approach recommended by Powerex on the December 4th stakeholder call to limit the amount a resource outside of California can be deemed delivered to California to the capacity available above the base schedule.