

**California ISO Extended Day-Ahead Market Initiative
CAISO Bundle #1 Workshop: Feb 11-12th 2020**

Comments of Public Interest Organizations

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The following Public Interest Organizations (“PIOs”) appreciate the opportunity to provide comments and questions stemming from the February 11-12 workshop on California ISO’s Extended Day-Ahead Market (“EDAM”) stakeholder initiative: Western Resource Advocates, Western Grid Group, Natural Resources Defense Council, Northwest Energy Coalition and Renewable Northwest. PIOs are encouraged with the significant progress made in defining major elements of the EDAM by CAISO and the EIM Entities and that there is broad agreement on many of EDAM’s guiding principles. PIOs further commend CAISO staff and EIM Entities for providing panel presentations to illustrate some of their positions and potential market design concepts. As indicated in prior comments to CAISO, PIOs support the following key guiding principles as part of the ongoing efforts to develop the EDAM¹. These guiding principles are:

- ❖ Enable growth of real time markets that are centralized to facilitate automated and optimal dispatch of energy.
- ❖ Ensure all market transactions are transparent and accessible.
- ❖ Promote optimal and efficient resource and transmission scheduling.
- ❖ Any market design should have the needed flexibility to promote diversity of resources and allow for ease of entry for newer market participants without compromising reliability needs of the Western Interconnection.

¹ <http://www.caiso.com/InitiativeDocuments/PIOComments-ExtendedDay-AheadMarket-IssuePaper.pdf>

- ❖ The final governance structure should incorporate processes that allow for meaningful representation of a variety of stakeholder voices in order to effectively inform market design and implementation.

1. General

PIOs offer the below clarifying questions with relevant context from the perspective of market design.

Question 1.1: CAISO currently runs its own day-ahead market (DAM). In order to optimize market benefits, CAISO’s DAM and the EDAM will need to be integrated. How do CAISO and the EIM Entities envision this integration and in what sequence? For example, will CAISO still run its DAM and then overlay an EDAM optimization on top of the DAM solution? Or will there be a single CAISO+EDAM optimization? It is also important to clarify how EDAM will align with ancillary services and capacity procurement, to the degree the EDAM does not co-optimize those resources.

Question 1.2: At the workshop, CAISO discussed that it was considering a new ancillary services market product. Can CAISO provide further insight on the potential interaction of this new product with the EDAM?

2. Resource Sufficiency Evaluation

PIOs generally support the EIM Entities’ principles regarding Resource Sufficiency in an effort to ensure that each Balancing Authority Area (“BAA”) in the EDAM has sufficient resources to meet its next-day load. We offer the following comments and questions for consideration in the draft proposal.

PIOs are concerned that the Resource Sufficiency Evaluation (“RSE”) “uncertainty requirements” could discriminate against renewable and demand-side resources by imposing capacity and availability rules that are overly burdensome. This could result in additional costs that are avoidable.

Question 2.1: Can “uncertainty requirements” be described more concretely? For instance: what are they, how they are measured, and how do they impact the RSE?

Question 2.2: EIM Entities state that the RSE should be simple and workable, and should be compatible with bilateral trading timelines and that there could be a forecast error with the timing difference(s). What is meant by “compatibility” with bilateral trading timelines? Can examples of this timeline compatibility issue be provided?

Question 2.3: EIM Entities believe that RSE enforcement is important. PIOs recognize the need for it. However, regarding the type of enforcement, EIM Entities believe that an “economic penalty” for failure to meet RSE is insufficient and that a “preventative enforcement” mechanism must instead be used. Why wouldn’t a penalty, essentially preventing market participation for periods during which the EDAM market participant has failed the RSE, be sufficient for preventative enforcement? It would be valuable for

the straw proposal to include further illustrations of the types of “preventative enforcement” mechanisms that EIM Entities are currently considering.

Question 2.4: CAISO has a must-offer obligation for all Resource Adequacy (“RA”) resources in the DAM. How would a *voluntary* bid rule under the EDAM RSE regime reconcile with a must-offer obligation? Could a voluntary bid rule potentially lead to strategic bidding or withholding?

Question 2.5: If EIM Entities and CAISO believe that the EDAM RSE and EIM RS Tests must be different, could you please explain your reasoning for this?

Question 2.6: PIOs recognize the intent of the 24-hour operating plans to provide some degree of certainty in terms of the EDAM RSE. Is it possible for the EIM Entities to clarify their definition of the plans being “non-binding” ?

Question 2.7: PIOs seek further clarity on the “Replacement Reserve Product.” What precisely are these reserves and are there previous events that motivated a proposal to create such products?

3. Demand Response Resources

PIOs are concerned that EIM Entities are not placing sufficient priority on enabling demand response resources (“DRs”) (i.e., load curtailable at a price subject to specified notice requirements, as well as flexible load that can be aggregated and dispatched) to participate as full resources in the EDAM. However, PIOs recognize that market design changes are currently being proposed by CAISO to further enable market participation by improving the bidding efforts for DR resources as part of the DAM Enhancements stakeholder initiative. PIOs believe that DRs should be allowed to bid into the market under “level playing field” rules to incorporate the “cost effectiveness” and “reliability” value of these resources. Since interruptible loads have a long history of providing cost-effective operating options, PIOs support any efforts to motivate such resources to participate in ways that provide flexibility for EDAM operations at least cost.

Question 3.1: How would CAISO consider including aggregated DR market services into the EDAM? How are DR resources currently deployed and priced in the EIM?

4. Self-Scheduling of Resources

PIOs seek additional information on how self-scheduling will be facilitated in the EDAM.

Question 4.1: If each EDAM BAA is separately responsible for its own reliable operation, is it anticipated that each BAA may or will designate the equivalent of reliability-must run (“RMR”) units within their BAA, and will those designations be treated as self-scheduled resources?

Question 4.2: Will an EDAM participant be allowed to designate any resource that it controls as self-scheduled in the EDAM? Will an entity be required to specify a classification for designation (e.g., RMR, regulatory-must run, price-taker and so forth, as is done in CAISO DAM currently), or will an entity be permitted to designate without a classification?

Question 4.3: If a resource is operated by a BAA to meet internal load that is not under contract to another entity, then is there any logical reason that resource would be designated as self-scheduled? If so, please explain.

5. Diversity Credits

PIOs support the view that diversity credits could be a very important contributor to cost-savings in EDAM. It seems that diversity credits should, in theory, measure reductions in resource sufficiency needed by the BAA on a standalone basis versus as an EDAM participant. However, if each BAA must pass the RSE as though it is a standalone entity (i.e., “no leaning”), it is then unclear what a diversity credit actually is measuring, and how and when it is measured.

Question 5.1: If each EDAM BAA must pass an RSE as though it is a standalone entity, how and when will the diversity credit be calculated? Can a real-world example be provided in the straw proposal?

Question 5.2: Would a hypothetical BAA (as a participant in the EDAM) get the same diversity credit if it self-scheduled 50% of its resources versus self-scheduling 10% of its resources?

Question 5.3: PIOs understand that planning reserve margin or Loss of Load Expectation (“LOLE”) as a long-term metric assesses the amounts of generation reserves needed to ensure long-term reliability. On the other hand, it seems that the diversity credit will be a metric that measures only day-ahead reliability benefits from being in a larger pool. Is there a relationship, or should there be a relationship, between a BAA’s diversity credit and the planning reserve margin or LOLE?

Question 5.4: Do both EIM Entities and CAISO expect the diversity credit to be dynamic, i.e. calculated daily as a result of 24-hour operations plans, or is it a static measurement made on a less frequent basis? Please explain.

Question 5.5: Can inputs to the diversity credit calculation be described?

6. Use of E-Tags

EIM Entities recommend the use of E-Tags as a potential option to validate external resource participation in the EDAM. It is also known that E-Tags are used in some scenarios of bilateral transmission operations. In either case, it seems plausible for E-Tags to become more critical

with EDAM implementation. PIOs are supportive of wider use of E-Tags in ways that can assist CAISO and EIM Entities with a more flexible and transparent EDAM framework.

Question 6.1: Are there any reasons for not using E-Tags as a tool to assist operators and BAs by providing additional data to help meet the 9 AM and 3 PM EDAM tests? In what way would E-Tags be used across different transmission buckets and also assist with the RSE?

Question 6.2: Are there existing barriers to a wider scale use of E-Tags? Please explain.

7. Transmission Compensation

Definitions for Buckets 1 and 2 transmission seem to be relatively straightforward. However, Bucket 3 transmission seems less clear. PIOs pose the following questions related to transmission compensation.

Question 7.1: During the response presentation on transmission compensation, the CAISO representative said that Buckets 1, 2 and 3 refer to inter-BAA transfers. To what degree should Buckets 1, 2 and 3 reflect and reference intra-BAA transmission usage?

Question 7.2: Is the primary purpose of Bucket 3 to address “wheel-through” energy only, for example: energy transacted in the EDAM that sources in one BAA, sinks in another BAA, and transits through a third BAA? If the answer is yes, is it expected that the Bucket 3 compensation scheme would be extended to the EIM, and if so, how would this change the compensation scheme?

Question 7.3: On average, is Bucket 3 expected to be a small or large proportion of the EDAM transmission system? How should the EDAM incentivize maximum participation?

Question 7.4: Does Bucket 3 include transmission interties with CAISO?

Question 7.5: It appears that Buckets 1 and 2 transmission costs are already embedded in either retail or wholesale rates (because of bilateral agreements), which is why compensation for their use is not being proposed. On the other hand, it is not clear whether Bucket 3 is included in retail or wholesale rates or not, or whether both cases might occur with Bucket 3. PIOs requests CAISO and EIM Entities to include in a future straw proposal, some details on how Bucket 3 transmission is intended to cover transmission usage that is not already compensated through retail or wholesale rates. Furthermore, if compensated through wholesale rates, how will that be implemented?

Question 7.6: PIOs are concerned that different BAA rates could introduce a potential for non-optimal decision-making amongst EDAM participants. Why would a Bucket 3 rate be differentiated among EDAM BAAs rather than a single EDAM-wide rate?

Question 7.7: If a transmission line is “merchant/independent”, contained and operated within a BAA or multiple BAAs, but is not owned by the BAA, would this transmission line be considered Bucket 2, or would it be excluded from the Bucket scheme altogether?

8. Congestion Revenue Rights

PIOs recognize the need for Congestion Revenue Rights (“CRRs”) – not only to allocate revenues derived from differences in congestion between the source node and the sink node in the day-ahead market, but also as an incentive for transmission owners to offer their transmission for EDAM dispatch (knowing that CRRs fully hedge any congestion charges transmission owners might incur from using their own). EIM Entities and CAISO provided differing views on how CRRs would be allocated in the EDAM construct under conditions of mismatched use of “transmission buckets” or “transmission capacity.” To better appreciate the allocation principles, PIOs propose the following questions:

Question 8.1: Could the use of CRRs as currently employed in the CAISO market be an option to consider for entities participating in the EDAM?

Question 8.2: Can CAISO and EIM Entities develop a common set of scenarios with regard to “mismatched transmission buckets” and “mismatched transmission capacity” and provide illustrations to contrast the differences in their proposed congestion rents allocation proposals?

9. Measurement & Reporting

Although measurement and reporting were not an identified workshop topic, PIOs recommend that EDAM market metrics be reported regularly and made available to the public through electronic or equivalent media. This will increase market transparency and provide a consistent dashboard to demonstrate the most efficient market solutions. As reporting on cumulative EIM cost savings has shown, demonstrating a fair, economical and equitable market facilitates diverse participation, which provides benefits to customers in a reliable manner.

PIOs offer the following examples of market metrics that could be regularly reported on:

- Does the system have enough energy?
- Is there enough generating capacity to meet peak conditions?
- Is there enough flexibility for the system to respond to uncertainties?
- Is transmission capacity constrained or fully accessible?
- What are the economic and reliability benefits to EDAM participants and consumers?²

Conclusion

² Rationale for this question lies in a MISO value proposition report that provides annual updates on the matter. <https://cdn.misoenergy.org/20200214%202019%20Value%20Proposition%20Presentation425712.pdf>

PIOs appreciate CAISO's consideration of our above comments and questions. With regard to the ongoing stakeholder initiative aimed at finalizing EDAM's market design, PIOs endorse the collaborative approach by CAISO and EIM Entities to move forward and enhance market efficiencies while sustaining reliability and reflecting public policy requirements. Such efforts should not only enable a diverse fuel mix, but also support cost-effective ways to develop a decarbonized electric grid.

Going forward, PIOs seek a transparent bidding process, a clear forecasting demand and load matrix, as well as reducing uncertainty and improving cost-effective clearing of energy imbalances. We appreciate CAISO's efforts to promote robust market participation that is fair, reduces risk, supports resource adequacy and diversity, and provides accessible market data and transparent procedures.