



Stakeholder Comments Template

Extended Day-Ahead Market Issue Paper

This template has been created for submission of stakeholder comments on the **Extended Day-Ahead Market (EDAM) issue paper** that was posted on October 10, 2019. Information related to this initiative may be found on the initiative webpage at: <http://www.caiso.com/informed/Pages/StakeholderProcesses/ExtendedDay-AheadMarket.aspx>.

Upon completion of this template, please submit it to initiativecomments@caiso.com by close of business on November 22, 2019.

| Submitted by | Organization | Date Submitted |
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Comments of the National Hydropower Association

The National Hydropower Association (NHA) appreciates this opportunity to comment on the California ISO (CAISO) Extended Day-Ahead market (EDAM) issue paper posted on October 10, 2019. As stated in the issue paper, the purpose of the EDAM proposal is to “improve market efficiency and more effectively integrate renewable resources by optimizing day-ahead unit commitment and scheduling across a larger footprint.”¹ NHA recognizes that EDAM market mechanisms will affect the voluntary dispatch of hydropower across the west to support renewable energy and carbon reduction goals. Therefore, we offer the following comments with an eye toward optimizing hydropower participation in the delivery of firm, carbon-free power products to EDAM customers.

NHA represents more than 240 companies, from Fortune 500 corporations to family-owned small businesses. Our diverse membership includes public and investor-owned utilities, independent power producers, developers, equipment manufacturers and other service providers. As a national association, we have members across the country, including California and its neighboring states in the Southwest and Pacific Northwest. The treatment of hydropower in this proposal will affect our members.

Hydropower is unique among generating resources because it is carbon free and can provide nearly *all* the attributes necessary for a reliable and resilient electric grid from dependable capacity to

¹ Extending the Day-Ahead Market to EIM Entities. Issue Paper. October 10, 2019. Page 3.

black start capability. Importantly, its ability to ramp up or down quickly in response to consumer demand or to offset variable energy resource production is valuable in a rapidly evolving electric system. As the grid integrates more and more wind and solar, hydropower's ability to provide capacity, energy and balancing services, frequency response, voltage support, load following, and long-term storage is increasingly critical. To be sustainable over the long term, an efficient market must send appropriate price signals to hydropower owners and operators that reflect the value hydropower resources provide. In any market, the treatment of hydropower will be profoundly important to assure a least-cost approach to reliably meeting load while achieving carbon reduction goals.

In July 2019, the National Hydropower Association's Board of Directors adopted the following principles for wholesale market design:

- Market rules should be technology neutral and not discriminate among non-emitting resources that provide similar services.
- Price formation should appropriately value the products and services provided by a resource.
- Reliability programs should recognize and value the reliability benefits hydropower projects can provide.
- Market rules should facilitate fair and equitable participation among internal, external or voluntary resources.
- Market rules should recognize the need for optimal dispatch of resources like hydropower that may have a limited fuel supply or operational limitations based on balancing multiple uses.

In the context of EDAM design, these principles relate to the following issues:

- **Resource sufficiency evaluation**

NHA agrees that resource sufficiency rules are necessary to “ensure that balancing authority areas do not inappropriately lean (without compensation) on the capacity, flexibility or transmission of other balancing authority areas.”² NHA urges CAISO's rules for resource obligations to be compatible and aligned between EDAM participating balancing authorities. Most importantly, resource sufficiency requirements should be designed to keep the grid reliable under a broad range of real-time conditions. Rules must also recognize the various attributes that different resource types bring to resource sufficiency. Specifically, there should be an evaluation of a given resource's energy and capacity characteristics, along with its ability to provide grid services such as flexibility.

- **Ancillary services**

The EDAM issue paper states that the initiative will contemplate whether and how trading of ancillary services could occur between EDAM balancing authority areas. In general, NHA supports exploring co-optimizing procurement of energy, ancillary services and imbalance reserves

² Ibid. Page 4.

across the EDAM footprint. Market rules that appropriately recognize and account for ancillary services will help clarify value and ultimately encourage their provision by generating resources, such as hydropower, that have the requisite attributes.

- **Accounting for greenhouse gas costs**

NHA supports aligned and compatible accounting of the GHG attribution of resources being dispatched to serve load within the EDAM footprint. The methodology selected should be compatible with the carbon and resource accounting requirements of EDAM market participants in states that have enacted carbon and clean electricity legislation and should result in a GHG price that fairly compensates carbon free resources like hydropower. A successful methodology would minimize the compliance burden for participants by eliminating duplicative approaches to reporting and accounting.

- **Price formation**

NHA supports fair compensation for energy, capacity and other grid services, along with transparent price formation. A successful market would co-optimize the procurement of the full suite of power products and limit the need for out-of-market actions or side payments. As stated in the issue paper, EIM entities requested that an evaluation of fast-start pricing and scarcity pricing be included in the EDAM initiative.³ NHA recognizes price formation is a critical issue and supports a full and in-depth evaluation of conceptual design and implementation. If market rules send the proper price signals for the attributes necessary to support grid reliability, they will prompt reinvestment in the resources that can supply them. Finally, NHA continues to support bidding rules that accommodate the true costs of unit dispatch, including opportunity costs.

Conclusion

NHA appreciates the CAISO's efforts to extend participation in its day-ahead market to energy imbalance market entities across the west. As the region moves toward deep decarbonization, hydropower is well-positioned to support a reliable, lower-cost transition to the future. Fair and reasonable compensation will be critical for assuring optimal dispatch of hydropower resources across the EDAM footprint. We look forward to monitoring the initiative's development.

³ EIM entities' September 16, 2019 letter to the CAISO Board of Governors and EIM Governing Body.