

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
<i>Lauren Tenney Denison Mike Linn</i>	<i>Public Power Council 503-595-9770</i>	<i>11/22/2019</i>

The Public Power Council (PPC) appreciates the opportunity to comment on CAISO's Extended Day-Ahead Market (EDAM) issue paper. The creation of an Extended Day-Ahead Market has the potential to profoundly change energy markets in the West, for both participants and non-participants of EDAM alike. EDAM has the potential to impact most energy transactions in the West and it is critically important that stakeholders are able to actively engage in the design of that market.

PPC represents nearly one hundred non-profit, consumer-owned public power entities in the Northwest. PPC's members are interested in the potential development of an Extended Day Ahead Market from several perspectives:

- as load serving entities in the potential EDAM footprint;
- as possible EDAM participants – either as EDAM Entities, owners of participating generation, or both;
- as active participants (both as buyers and sellers) in Western bilateral markets which will be impacted by an EDAM; and
- and as purchasers of preference power and transmission services from BPA (whose transmission use and generation revenues stand to be impacted by EDAM whether or not BPA becomes an EDAM participant).

Given the importance of this market evolution, PPC has partnered with other public power utilities¹ in the Northwest to develop common interests on principles and elements that we believe should be applied to any centralized day-ahead market that develops in the Northwest, including EDAM. These interests, included as an attachment to these comments, are not intended to offer support or opposition to any specific new or expanded market proposal, rather, the provide Northwest public power's perspectives on market design.

The attached interests address market design only. The governance structure of an extended day-ahead market is also of critical importance to PPC and the broader Northwest public power community. We understand that proposed changes to EIM governance will be necessary for EDAM and will be developed through the Governance Review Committee process. We will actively engage and provide perspectives and comment on governance-related changes as part of that separate initiative process.

We note there are many consistencies between the concepts in the CAISO's EDAM issue paper and the Northwest Public Power Interests. PPC largely supports the ideas conveyed in this issue paper, though we have many questions on how these concepts will be executed. In general, we agree with the proposed scope of the EDAM initiative and are extremely supportive of an iterative approach to these discussions, including opportunities for further education on the identified issues.

We also agree that there may be cases where market developments in EDAM should be extended to the EIM to provide consistency between the two markets – in some cases this may provide an opportunity to improve the EIM market design.

PPC looks forward to working with CAISO staff and other stakeholders to design a market that creates and equitably distributes benefits for ratepayers across the west.

Stakeholder Process

In addition to our comments on the topics below, PPC offers several suggestions for the CAISO's EDAM stakeholder process. Given the complexity of this effort, including its interaction with other markets and the broad range of stakeholders that will be impacted, CAISO should employ a more robust stakeholder process than is usually part of its policy development process.

The proposed timeline is very aggressive and includes only one workshop (or none at all) to discuss some very technical and complex issues. CAISO should be receptive to requests for additional workshops throughout this process. Such workshops may be needed to cover issues that are identified, but not specifically included, in the current list of stakeholder workshops, new topics that are added to the scope of the EDAM effort after it begins, or to provide educational opportunities for those issues that CAISO is already planning on addressing in workshops.

CAISO should also consider alternative meeting structures to increase stakeholder engagement and understanding. This could include allotting time for stakeholders to present their perspectives at various workshops to increase understanding of how proposals may impact different stakeholder

¹ The Northwest Public Power Interests for a Day-Ahead Market were developed by the Public Generating Pool, the Public Power Council and Northwest Requirements Utilities

groups. CAISO should also consider hosting workshops in various locations in the west, similar to how the Regional Issues Forum meetings are conducted. This would encourage participation from a broad set of stakeholders.

It is also worth considering extending the time for stakeholder comment. Two weeks will not be enough time to respond to most workshop materials, particularly given the technical nature of these topics. CAISO should consider providing 30 days for stakeholder responses; potentially 45-60 days to respond to updated proposals that require additional analysis.

PPC also requests that CAISO make a specific effort to notify customers where and when they can engage in the development of Business Practice Manuals and Tariff language related to the EDAM process. For those less familiar with CAISO's processes, the different venues used to address these issues can be difficult to track. Additionally, development of this language should be completed once policy decisions related to EDAM issues are made.

Again, we thank the CAISO for this opportunity to comment and appreciate the efforts of CAISO staff to design a transparent and efficient process for designing an extended day-ahead market.

1. Transmission Provision

How transmission is provided to parties - and the method of compensation for that transmission - will be a key area of interest for PPC and its members. These policies will impact the benefits that are achieved through EDAM and the ability of different stakeholders to access those benefits.

We agree that the current approach to transmission in the EIM needs to be reconsidered for EDAM. In our *Interests* document, Northwest public power entities describe areas of consideration for developing transmission policies for a day-ahead market. Among these interests is that transmission in EDAM Entities' transmission service should continue to be offered consistent with Open Access principles – such as equitable access and assignment of costs among transmission customers, including those participating in EDAM.

The EDAM issue paper includes discussion on impacts to EIM/EDAM Entities that facilitate a large number of wheel throughs. We share concerns that some EIM entities that facilitate a large number of wheel throughs may be adversely impacted unless proper policies regarding wheeling compensation are in place. The potential compensation mechanisms for wheeling should be considered as part of this process.

The alternatives and framework for transmission provision identified in CAISO's white paper and in the EIM Entities Principles for EDAM seem promising and we look forward to more discussion exploring those options during the stakeholder process.

The Northwest Public Power Interests for a Day-Ahead Market further describe our

interests in transmission provision.

2. Distribution of congestion rents

Discussion of congestion rents should be closely coordinated with, if not combined with, the discussion on transmission provision since it is related to the distribution of costs and benefits associated with transmission use in EDAM.

3. Resource sufficiency evaluation (including forward planning and procurement; trading imbalance reserves and capacity; EIM resource sufficiency evaluation)

PPC supports the concepts included in the CAISO's EDAM Issue Paper related to RS, particularly the principle that BAAs should not inappropriately lean on one another for capacity, flexibility or transmission. Hitting the right balance that creates benefits though developing more efficient day-ahead unit commitment while ensuring BAAs cannot lean on each other's resources will be challenging.

The resource sufficiency rules for EDAM should enable trading of reserves and capacity, including allowing supply from external participants to count towards an entity's resource sufficiency requirement.

Resource sufficiency rules need to be developed so they are workable for EDAM Entities that have diverse generation and other load service entities within their BAA. For instance, the issue paper states that "it may be necessary to change the resource sufficiency evaluation to only count resources whose capacity is contracted to an EDAM balancing authority area on a forward basis." For EDAM balancing authority areas with several load-serving entities, this would need to account for capacity contracted to LSEs within the EIM entity as well as that contracted to the EDAM Entity.

To ensure reliability, deliverability should be considered when assessing resource sufficiency in EDAM.

The Northwest Public Power Interests for a Day-Ahead Market further describe our interests on resource sufficiency.

4. Ancillary services

PPC supports further exploration of inclusion of ancillary services in EDAM. To the extent possible, procurement of ancillary services should be optimized with the procurement of other energy and capacity in the market to produce the most efficient market outcome. Any proposal to procure ancillary services in EDAM should be consistent with principles set forth on other issues including price formation, resource

sufficiency and transmission.

PPC would like to better understand how EDAM's procurement of ancillary services would interact with Balancing Areas current ancillary services programs and how EDAM would provide ancillary services without negatively impacting reliability in the EDAM footprint.

5. Modeling of non-EDAM imports and exports

PPC generally agrees that the approach to modeling imports and exports from outside the market footprint should be consistent both between the EIM and EDAM markets, and between CAISO and EIM/EDAM entities. PPC would like to further explore the issue before determining the appropriate approach.

6. External participation

PPC encourages further exploration of EDAM policies that could allow external participation in the market, both through acknowledgment of bilateral contracts that may contribute to an EDAM Entity's resource sufficiency, and through allowing economic bids of external resources into EDAM.

There are several ways external resource participation could create benefits:

- Many entities will not be able to immediately join EDAM, and this could be a helpful bridge to allow them to continue to participate in Western markets prior to EDAM participation.
- Allowing participation of external resources may create additional benefits for EDAM Entities through increased liquidity and access to lower cost generation.
- Allowing external resource participation may also decrease the likelihood of entities being able to exercise market power.

7. Accounting for greenhouse gas costs

PPC agrees that a different construct is needed for GHG accounting in the day-ahead market than is currently used in the EIM. This is a potential opportunity to develop an improved accounting methodology that could extend to EIM and further solve "leakage" and "deeming" issues occurring in the EIM today.

It will be important to design a GHG accounting methodology that is flexible enough to adapt as additional carbon legislation is developed in the West. It will also be important to appropriately define the "compliance region;" we would like to understand whether EDAM Entities may need to use different definitions depending on their footprint and how they are impacted by carbon legislation. In order to facilitate development of a flexible and widely

applicable GHG accounting design, CAISO should provide opportunities for stakeholders to present on and further explore the issue. The Carbon Workshop held at the June 2019 Regional Issues Forum was an excellent beginning to this discussion that should be built-on during this process.

The Northwest Public Power Interests for a Day-Ahead Market further describe our interests on GHG accounting.

8. Convergence bidding

PPC is open to exploring convergence bidding as part of EDAM but wants to ensure that if allowed, it would not impact reliability. Proper price formation and resource sufficiency requirements may reduce this risk.

9. Price formation

Proper price formation will be a key component in ensuring EDAM's success and making sure that the benefits created by EDAM are equitably allocated. Change being pursued in the DAME initiative are a good foundation for EDAM. Adequately compensating resources for the services, they provide and co-optimizing the procurement of energy and capacity are significant improvements to the current day-ahead market that should be carried into the EDAM. Additional pricing mechanisms, such as fast start and scarcity pricing as identified by the EIM Entities, should also be explored through this discussion.

PPC's interests on price formation are further described in the Northwest Public Power Interests for a Day-Ahead Market.

10. EDAM administrative fee

CAISO should continue to strive to assign administrative fees consistent with cost-causation principles.

11. Review of day-ahead settlement charge codes

It will be important for participants to understand these charge codes and their related drivers. Assigning these charges to the BAA and having the BAA distribute charges within their territory appears to be appropriate but we look forward to more discussion of this issue.

12. Miscellaneous (inter SC trades)

EDAM Relationship to DAME

PPC appreciates CAISO acknowledging the relationship between the EDAM effort and the ongoing Day-Ahead Market Enhancements initiative. Aligning the timing of the two initiatives should be helpful to ensuring that these efforts stay coordinated. Our understanding is the developments in the DAME will be the starting point for market design in EDAM, so this coordination will be crucial, particularly for EDAM price formation.

The Financial + Forecast proposal developed through DAME provides an excellent starting point for discussion on EDAM price and product formation. The development of imbalance reserves as well as market recognition and compensation for the range of attributes and services provided by different types of resources/bids in the market improves upon the existing CAISO Day-Ahead market structure. These types of improvements will be key to creating an EDAM that is able to provide, and equitably allocate, benefits for entities across the west.

When PPC and its members are considering whether to support or participate in EDAM, the ability of that Day-Ahead market to maintain reliability will also be a key consideration. The market should be designed such that it continually procures sufficient resources to ensure reliable real-time operation. In order to ensure such reliability and reduce the need for out of market actions, reserves and capacity procured in the day-ahead market must be deliverable to load. These are all concepts explored in DAME that should be carried into EDAM.

13. EIM Governing Body classification

PPC supports the joint authority of the EIM Governing Body and CAISO Board of Governors on EDAM topics. This “joint authority” is appropriate given that EDAM would greatly impact EIM Entities and the EIM Governing Body should be involved in decision-making on all EDAM topics.

14. Additional items to be added to scope:

Market Power Mitigation

Application of market power mitigation should be included in the scope of EDAM. This discussion should review whether market power mitigation is applied differently within and outside of the CAISO BA.

Market Oversight

Market oversight should also be included in the EDAM scope. PPC would like to explore

whether the existing market oversight in EIM would be sufficient for a day-ahead market, and whether that oversight structure is sufficiently independent.

Problems in the existing day-ahead market, including errors in settlements and systematic reliance on out-of-market actions, are concerning to PPC and we would like to explore potential mechanisms to ensure that such issues are quickly discovered and promptly corrected. EDAM will cover a much larger number of transactions than the EIM and creating mechanisms to identify and resolve any market design issues will be crucial.

This topic may be better addressed as part of the EDAM Governance Review, and we seek feedback from the CAISO on the proper forum for that discussion.

The Northwest Public Power Interests for a Day-Ahead Market include interests related to assuring proper market function and application of market power mitigation.

Northwest Public Power Day-Ahead Market Design Interests

November 22, 2019

The NW Publicly Owned Utilities (NW Public Power) recognize that centralized markets have been evolving as part of the Western power landscape. The market design and governance foundation of a centralized day-ahead market is critical to an equitable sharing of value among participants. This paper is not intended to offer support or opposition for any specific new or expanded market proposals but provides NW Public Power's perspective on principles and elements that should be applied to any centralized day-ahead market that develops in the Northwest.

This document addresses market design interests only; governance will be addressed separately.

Transparent Price Formation and Fair Compensation for Services

- The market solution co-optimizes the procurement of energy, capacity, flexibility, and ancillary services (if included in design) needed to meet reliability needs through the market and minimizes the need for out of market actions
- Bidding rules allow resources to reflect true costs of dispatching units, including opportunity costs
- Market rules send proper price signals for the attributes and/or products required to meet reliability needs
- Products and price formation recognize and appropriately compensate resources for the attributes supplied to the market
- Market prices accurately reflect shortages and scarcity conditions

Resource Sufficiency¹ Requirements Promote Reliability, Ensure Equity and are Applied Consistently

- Requirements ensure sufficient resources and flexibility to meet a wide range of potential real-time conditions with a high level of confidence to ensure reliable operation of the system
- Counting rules appropriately account for the capacity, energy, and flexibility that different resources contribute towards meeting requirements
- Requirements assure resources are deliverable to load
- Effectively prevents entities from leaning on the market for energy, capacity, and flexibility needs
- Enforcement measures do not allow Resource Sufficiency compliance to be a discretionary economic alternative
- Requirements and counting rules are applied consistently to all entities subject to the test and avoid double-counting of transactions
- Timelines allow continued participation in bilateral markets

External Resources are able to participate and are treated comparably

- Market rules provide external resources the ability to economically participate in the day-ahead market and be treated comparably to internal resources

¹ The term Resource Sufficiency in this context references a showing of resources with the appropriate resource characteristics that are available to meet demand on a shorter time horizon--day-ahead and real-time.

Transmission Framework meets Open Access Principles and Minimize Cost Shifts

- Open access and reservation priority principles are upheld
- Transmission framework minimize cost shifts to load and results in no adverse impacts to existing transmission rights
- Transmission Owners and Service Providers receive sufficient compensation to cover the costs of existing transmission and those costs are appropriately assigned to users based on cost causation.
- Transmission rights holders are ensured congestion/financial rights to mitigate congestion costs

Market Power Mitigation recognizes the unique attributes of resources

- Mitigation methods accept and provide for the complex and dynamic nature of hydropower planning, operational constraints, and opportunity costs. Therefore, opportunity costs for hydropower should recognize the trade-off between producing energy today instead of producing energy in the future, as well as the opportunity costs of alternative real-time bilateral market transactions
- Market Power Mitigation should only occur where the opportunity to exercise market power exists
- Market Power Mitigation methodology should consider the unique aspects of a voluntary market which includes choices surrounding the nature of a voluntary market (access to other opportunities, opportunity costs, the cost of water in various time increments, etc.)

Greenhouse Gas Accounting Accurately accounts GHG attributes of resources

- Accurately accounts for and values the GHG attribution of resources being dispatched to serve load in a carbon-regulated state and credits those resources accordingly
- Methodology is compatible with carbon and clean energy legislation of all states that impact day-ahead market participants

Respects Existing Laws, Statutory Obligations, Regulations, and Local Regulatory Authorities

- Organized markets with different kinds of participants (e.g. IOUs, POUs, PMAs, etc.) must respect existing laws, statutory obligations, regulation, and local regulatory authorities
- Resource Sufficiency requirements do not supplant local regulatory decision authority for resource procurement

Proper Market Function is Assured

- An independent market expert provides routine review and reporting, evaluating the market design and function relative to fair and competitive market principles
- Mechanisms are in place to signal when the resource sufficiency framework is not functioning properly
- Mechanisms are in place to evaluate proper price formation relative to costs of energy, capacity and flexibility
- Mechanisms are in place to assure proper GHG accounting and compensation