

# Comments of Seattle City Light on CAISO Local Market Power Mitigation Enhancements Issue Paper/Straw Proposal

Submitted by	Company	Date Submitted
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Seattle City Light (Seattle) is the tenth-largest consumer owned electric utility in the nation, providing electrical service to more than 415,000 residential, commercial, and industrial customers in the City of Seattle, Washington and six adjacent cities. Seattle owns and operates hydroelectric resources with approximately 2,000 MW of flexible, fast-ramping capacity. We regularly transact in the wholesale energy and transmission markets. Seattle executed an Implementation Agreement with the California Independent System Operator (CAISO) and intends to begin participating in the Energy Imbalance Market (EIM) in April 2020.

## Summary of Comments

Seattle commends CAISO for opening a formal stakeholder initiative to address mitigation issues and propose a new default energy bid (DEB) option for EIM use-limited resources. The stakeholder concerns that are the catalyst for this initiative are serious ones that Seattle believes could be a disincentive to voluntary participation in EIM, particularly for hydro-based entities. Resolving the issues around mitigation triggering inappropriately and enhancing the DEB options for EIM use-limited resources should therefore be a very high priority. Seattle believes CAISO has taken these concerns seriously and has made positive steps forward in addressing them in this straw proposal. Seattle's primary outstanding concern unaddressed in the current proposal is ensuring that the DEB option for EIM use-limited resources is sufficiently flexible to represent our resource opportunity costs. Seattle encourages CAISO to consider incorporating a more flexible scalar and a "conduct threshold" level in its EIM use-limited DEB formula.

## EIM Use-Limited Default Energy Bid

Seattle supports an EIM use-limited DEB that would afford EIM use-limited resources the flexibility to reflect their marginal opportunity costs. It cannot be over-emphasized that sellers of use-limited resources such as hydro are best positioned to estimate their own opportunity costs, given the dynamic and complex nature of hydro systems and their varying constraints. For example, Seattle's constraints include: flow forecasts, flood control, flow and ramp constraints to support fish habitats for multiple species, total dissolved gas constraints,

recreation, and the coordination required to manage a cascading hydro system. It is highly unlikely that a DEB formula will be able to consistently and accurately reflect these constraints, thus any DEB methodology must allow for sufficient pricing flexibility.

### ***CAISO's Proposed EIM-Use Limited DEB Formula and Supporting Analysis***

Seattle supports CAISO's approach to an EIM use-limited DEB that is comprised of the maximum of day-ahead and month-ahead future prices at a bilateral trading hub. This proposal recognizes a resource's opportunity cost of generating today based on the opportunity to sell energy in the future in higher priced periods and reflects the bilateral market opportunities for EIM use-limited resources. However, CAISO's proposal does not recognize hydro's ability to sell on the best individual days and best hours within any particular month or day, since the day-ahead and month ahead future prices reflect the average of the highest prices in a given day or month.

CAISO's DEB formula allows some additional flexibility by applying a scalar of 110%, however, CAISO's analysis that supports this scalar has a number of limitations. CAISO's analysis estimates what DEBs would have been based on historical bilateral prices at Mid-C over a period from October 2016-September 2017 and compares these values to locational area price energy market prices for North of Path 15 (NP-15) and EIM Prices for the PACW BAA. CAISO then compares these data to the 75th percentile of EQR data for BC Hydro during this period. CAISO's analysis only analyzes BC Hydro EQR data sales and thus is of limited value in targeting a scalar to other EIM entities. CAISO's analysis also compares against the 75% percentile of EQR data, instead of the actual EQR data without explaining why it made this limit. Finally, CAISO's analysis does not look at a range of different scalars.

Notwithstanding these limitations, CAISO's analysis to-date suggests that this scalar would not offer the necessary flexibility to reflect opportunity costs for use-limited resources, particularly for those with one month or less of storage. DEBS based on prompt month prices (reflecting resources with one month of storage) resulted in instances where DEBs were below the average EQR 75 percentile, whereas DEBS based on 6 months and 12 months of storage did not have instances where they fell below the EQR 75th percentile prices.

Seattle requests that CAISO enhance its analysis to further refine an appropriate scalar level. Specifically, Seattle requests that CAISO:

- Update its analysis to incorporate EQR data for other EIM entities, including Seattle;
- Update its analysis using 100th percentile of EQR data;
- Perform an analysis that looks at a further range of scalars, up to 250%.

We think the above requests for additional analysis could help to better target a scalar, but we also note that any analysis will not be able perfectly forecast future opportunity costs. Given the importance of ensuring that DEBs do not result in offers below a resource's marginal costs, we believe a scalar that errs on the side of more flexibility than less is warranted.

### ***Conduct Threshold***

Another approach that would enable more flexibility in an EIM-use limited DEB would be to

incorporate a conduct threshold in the formula where bids below a certain level would never be mitigated and bids that do not exceed a reference level by the lesser of a dollar amount or a percentage of the reference price are also not mitigated. Incorporating a conduct threshold recognizes that not all offer prices above a DEB reflect an attempt to exercise market power. Seattle encourages CAISO to further explore this option.

## **Mitigation Issues**

### ***Flow Reversal and Extension of Mitigation***

Flow reversal is a phenomenon that occurs when an EIM balancing authority is import-constrained in the real-time market mitigation run, triggering mitigation, which then in certain cases makes the BAA a forced exporter at the mitigated bid price. Seattle believes correcting this issue is essential because it results in mitigation triggering beyond what is necessary to resolve market power, and, therefore has the potential to cause economic harm to EIM entities.

Seattle is encouraged by CAISO's proposed solution to the flow reversal issue which would adjust the competitive LMP for each market run and eliminate the rules that do not allow for market power mitigation to be considered for each market run individually. It appears this solution would appear to prevent flow reversal from occurring and would also eliminate the automatic extension of mitigation across all intervals in an hour and from the fifteen-minute market to the real-time dispatch.

Given the significance of this issue, Seattle would like to better understand the extent of the flow reversal issue in the EIM and recommends that CAISO provide an analysis that demonstrates the occurrence of flow reversal by EIM entity over a given period of time.

### ***Economic Displacement Between Mitigated BAAs***

Seattle appreciates CAISO raising the issue of "economic displacement" which CAISO describes as a scenario where a group of EIM entities become import-constrained and energy from one resource is replaced with energy from another beyond what is necessary to resolve market power. CAISO explains that the voluntary nature of EIM calls into question the economic displacement of resources between EIM entities when using mitigated bids. Like flow reversal, this issue appears to be tied to mitigation triggering beyond what is needed to resolve market power. Seattle is interested in further exploring this issue and possible solutions, such as those discussed at the 9/28/18 Market Surveillance Committee which centered on limiting the volume of offers subject to mitigation for each EIM entity to the quantity that is relied upon to serve imbalance needs. We think this issue would benefit from further technical discussion in order to ensure proposed solutions do not have unintended consequences. We would also like to better understand the occurrence of economic displacement between a group of import-constrained EIM entities and recommend that CAISO provide an analysis that demonstrates how often this is occurring across the EIM.

Seattle appreciates the opportunity to provide comments and look forward to participating in the October 10, 2018 workshop and subsequent rounds of comments. If you have any questions regarding these comments, please contact Lea Fisher at 206-386-4546.

