

Comments on EIM Resource Sufficiency Evaluation Enhancements Issue Paper

Department of Market Monitoring

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The Department of Market Monitoring (DMM) appreciates the opportunity to comment on the *EIM Resource Sufficiency Evaluation Enhancements Issue Paper* and workshop discussions.¹

Comments

Tests should be as accurate as possible without unnecessarily restricting EIM transfers

The capacity and flexible sufficiency tests should be as accurate as possible to prevent capacity leaning. However, as discussed in the workshops, the effects of EIM transfers on the market dispatches and commitments can cause difficulties in creating accurate tests. If the tests err on the side of being overly stringent they could unnecessarily restrict EIM transfers when a BAA may have brought sufficient capacity to the market. The value of the Western EIM is largely derived from facilitating efficient trading between BAAs. Unnecessarily restricting transfers would reduce this trading and the benefits from the Western EIM.

DMM continues to recommend that the capacity test could exclude some capacity that may be bid into the real-time market but which is not available, such as resources with a start-up time greater than the 4.5 hour STUC horizon and capacity that a resource cannot ramp to as it returns from an outage. However, DMM continues to caution against excluding capacity with long start times that may have been available but for economic decisions made over the real-time market horizon to make that capacity unavailable only because it was more efficient to displace that capacity with less expensive power from other balancing areas.

Load biasing can affect transfer restriction consequences of test failure

One of the effects of CAISO operators' upward load bias can be to increase EIM transfers into the CAISO BAA. If the CAISO fails a test, the transfers would be restricted to the transfers from previous intervals. But transfers in these previous intervals would be higher because of the load biasing than they would be without the biasing. This would reduce the consequences of failing the test.

Creating a way to include load bias in the tests could help to more accurately cause the CAISO BAA to fail sufficiency tests when the CAISO BAA would otherwise be relying on the increased transfers from the load bias to pass the tests. As discussed in the workshops, including the load

¹ *EIM Resource Sufficiency Evaluation Enhancements Issue Paper*, California ISO, May 28, 2021:
<http://www.caiso.com/InitiativeDocuments/IssuePaper-EIMResourceEfficiencyEvaluationEnhancements.pdf>

bias in the tests may not be straight forward. However, even with load biasing included in the tests, biasing load could still increase transfers before a test is failed—thereby causing transfers to be restricted to a higher level than if load had not been biased. This effect of load biasing should be considered when reviewing the consequences of test failures.

Consider having certain emergency conditions automatically induce test failures

The ISO and stakeholders should consider having BAAs automatically fail the capacity test if they enter certain emergency conditions. If a BAA declares that it is short on capacity, it is worth considering having the test treat it as short on capacity. Ideally, the capacity test would already reflect the shortages. However, it could be appropriate to add certain emergency conditions as additional triggers for a balancing area to fail the capacity test.

Financial mechanisms for test failures may be better than current transfer restrictions

DMM is encouraged that the ISO and stakeholders are considering financial mechanisms for capacity and flexible ramping sufficiency tests failures. The current method of simply restricting EIM transfers to previous levels can be problematic. When failures occur while the BAA is already receiving significant transfers, the transfer restrictions can have limited or even no impact. But in other circumstances the transfer restrictions can also stop a BAA from receiving needed energy when energy is readily available from willing sellers in other BAAs.

A capacity payment from the BAA that is short on capacity to those that provide the capacity could be a better alternative or supplement to other measures. Such a capacity payment should be structured so that it encourages capacity to be procured beforehand rather than relying on the Western EIM as a backstop.

The ISO and stakeholders should also consider having capacity charges change depending on number of previous failure, or depending on system conditions during at the time of failure. For example the charges might be higher during tight system conditions and lower during more normal conditions.

The ISO and stakeholders can consider tests that look further out than the current hour

The ISO and stakeholders can also consider tests that look out further than an hour potentially for all BAAs or perhaps just the CAISO BAA. For example, performing a resource sufficiency evaluation at the outset of short-term unit commitment might mitigate some of the issues with determining available capacity discussed in the workshops.

The ISO should consider increased transparency related to the uncertainty variable added to the bid-range capacity and flexible ramping sufficiency tests

The ISO should consider increased transparency on the uncertainty input to the tests including the source interval for that uncertainty as well as the contribution from load, solar, or wind

error. An example of such output is shown below. This would help EIM entities to (1) better understand the drivers for their uncertainty and (2) identify (and potentially fix) instances when the uncertainty flowing into the resource sufficiency evaluation is because of a data error.

Date	Hour	Interval	BAA	Direction	Uncertainty	Uncertainty Source Date	Uncertainty Source Hour	Uncertainty Source Interval	Load Error (MW)	Solar Error (MW)	Wind Error (MW)
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