



# Memorandum

**To:** Western Energy Markets Governing Body and ISO Board of Governors

**From:** James Bushnell, Chair, Market Surveillance Committee

**Date:** April 22, 2026

**Re:** **Briefing on Market Surveillance Committee activities: February - April 2026**

---

***This memorandum does not require Western Energy Markets Governing Body or ISO Board of Governors action.***

The terms of two outgoing members of the Market Surveillance Committee (MSC), Dr. Ben Hobbs and Dr. Scott Harvey concluded on March 31, 2026. James Bushnell is the sole ongoing member. It is anticipated that two new members will be appointed at the April joint ISO Board of Governors and WEM Governing Body general session meeting. This memo covers the MSC's activity and topics of focus during the period of late February through April 22, 2026.

The MSC met internally several times with CAISO staff to continue ongoing review of topics most critical to the pending start of the Extended Day Ahead Market (EDAM). The main topics of focus during this period were 1) the ongoing evaluation of and adjustments to key "tunable parameters" in the market software related to the day-ahead market enhancements (DAME), 2) the evaluation of the currently proposed approach for congestion revenue allocation (CRA), and 3) potential future designs for CRA. The first topic was a subject of an MSC general session meeting on February 6, 2026. The latter two topics were also the subjects of the MSC general session meeting held on March 6, 2026.

## **DAME Parameters**

Beyond expanding the geographic reach of the day-ahead market, the advent of the EDAM will also coincide with the implementation of several significant design changes, most notably the introduction of new imbalance reserve products and a redesign of residual unit commitment to procure a redefined product (reliability capacity). These are among the design elements contained in the DAME initiative that was approved in May 2023. In a May 2023 MSC opinion on the DAME proposal, we agreed with CAISO that "the issues the DAME Initiative addresses are very important, not just for the success of the EDAM initiative, but for improving the efficiency and transparency of the CAISO market." We also noted, however, that "many significant uncertainties surround the current proposal" and that at the time it was "impossible to credibly estimate the price and cost impacts of the design."

At the time, the MSC highlighted several aspects of the DAME design that warrant additional evaluation and monitoring. These included.

1. The limitation of capacity eligible to sell imbalance reserve (IR) to that which is 15 minute (later revised to 30 minute) rampable. While IR is meant to be “flexible” capacity, the actual amount of IR that will be needed would likely be known well before 30 minutes in advance of deployment. The MSC has noted that this requirement could therefore unnecessarily limit potential IR supply and consequently lead to higher prices.
2. The assumptions necessary to predict exactly where IR needs will emerge. Unlike other reserve products, IR will be priced at the nodal level. This requires assumptions about the “deployment” of both forecasted needs and the resources to meet those needs.
3. Various complexities surrounding the procurement of reserve capacity from storage resources, which require they maintain an adequate state-of-charge so that they can perform if actually called upon to provide energy. These complexities include an “envelope constraint” that limits the amount of storage capacity allowed to provide IR and reliability capacity.

Over the last several months the CAISO has undertaken two distinct efforts to better quantify the impact of the various elements of the DAME design: a simulation-based approach of scenarios based upon benchmark historical market days and the more recent ongoing “parallel” daily calculation of market outcomes under both the outgoing and incoming market designs.

Both efforts have been informative and revealed ongoing areas for attention, while also raising concern among some stakeholders about the price levels for some products emerging from these efforts. Many results from these exercises may be due to faulty inputs, rather than signs of underlying design problems. It is unclear to us the extent to which potentially concerning outcomes have been the result of assumptions made in the simulation exercise on the one hand and the unrealistic levels (and lack of) of bidding in the parallel operations process.

As a result of these and other efforts, the CAISO has proposed some changes to the initial implementation of DAME to be in place at least through the summer peak periods later this year. The intent is to take a more conservative approach to the acquisition of these new products. The changes include adjustments to so-called “tunable” parameters that were always intended to be adjustable as more was learned about the performance of the design. The CAISO has also proposed an overall reduction in the amount of the new imbalance

reserves it will procure initially. These reserves are designed to cover a range of uncertainty above and beyond the expected net-load as of the day-ahead time frame. The CAISO is proposing to procure reserves to cover 10/90th percentile outcomes instead of the originally adopted 2.5/97.5th percentile outcomes.

The MSC supports this cautious approach to DAME implementation. While the recent changes do not directly address some of the design concerns we raised earlier, they will indirectly reduce the cost impacts of those, and other, design elements. The new reserve products are meant to replace more *ad hoc* market actions such as operator adjustments to load forecasts. While a more cautious approach may limit the potential benefits of these new products, caution with the DAME roll-out should not pose any more risk than the current status quo practices.

### **Congestion Revenue Allocation (CRA): March 6, 2026, General Session Meeting**

The MSC meeting on March 6 was focused on another important aspect of EDAM, the allocation of congestion revenues collected in the newly expanded day-ahead market. This topic was the subject of an initiative approved in June 2025. At that time, the MSC expressed serious reservations about the incentives created by the changes to CRA, but had not seen enough empirical analysis to determine the magnitudes of any impacts of these incentives.

The changes filed in June 2025 allowed for balancing areas (BAs) joining EDAM to better support existing and newly marketed transmission rights. The changes also masked the costs of “loop flow” that schedules within one BA impose on other neighboring BAs. The changes also create potentially perverse incentives to favor the rigid self-scheduling of resources rather than offering them flexibly into the market. Most parties, including CAISO staff, recognized these issues and the CAISO has started an initiative for a “phase II” proposal that is intended to improve upon the current CRA.

The crux of the problem is that the current CRA can dilute or even eliminate the congestion price signals that are key components of location marginal prices (LMP). These congestion prices are meant to convey the full congestion costs of injecting (or withdrawing) power from a given location in the grid. With EDAM’s geographic expansion of the market, these congestion price signals expand to reflect the costs that day-ahead transactions in one BA (e.g., PacifiCorp East) impose on other BAs (e.g., CAISO). The explicit calculation of these costs constitutes an important benefit from the expanded market. Previously, transactions could appear to be artificially “low cost” because they did not reflect the actual congestion costs imposed on neighboring BAs.

However, under the current CRA approach, while LMPs calculated at each location will reflect all costs, some of the congestion revenues collected will be rebated back, ultimately to those resources that impose congestion, thereby weakening the link between the price

signals and the costs ultimately paid by some users of the grid. Under the current CRA, these rebates will be limited to transactions that are self-scheduled, providing a disincentive to flexibly participate in the EDAM market. Such participation is also discretionary, allowing firms to avoid paying some congestion costs when those costs are positive, but still collect the congestion value when the congestion costs of their transaction is negative.

At the March 6 meeting, Guillermo Bautista Alderete, Director of Market Performance and Advanced Analytics at the ISO, presented an analysis of historical congestion from WEIM operations as a basis for assessing the potential impacts of the EDAM congestion revenue allocation (CRA) methodology. This backward-looking estimate is not a perfect metric for predicting what the actual impacts may be under EDAM, but is still informative about ballpark magnitudes. Overall, the analysis indicates that the impacts of CAISO schedules on PacifiCorp are minimal. The impacts of PacifiCorp schedules on the CAISO are larger, ranging from \$2 - \$7 million per month. For context, total day-ahead congestion rents in the CAISO have averaged around \$20 to \$50 million per month, and congestion accounts for about 5% of day ahead energy market costs.

Although the cost transfers estimated for the PacifiCorp participation in EDAM may not be substantial, there are indications that the impacts of other future EDAM expansion could be much larger. These numbers also do not attempt to estimate any inefficiencies resulting from behavioral changes induced by the CRA incentives.

Also at the March 6 meeting, Scott Harvey presented his thoughts on an improved future CRA approach. Dr. Harvey highlighted concerns with designs (like the current CRA) that tie congestion rent allocation to the use of firm transmission rights or to the dispatch of generation to serve balancing area load, as such designs generally create inefficient use-it-or-lose-it self-scheduling incentives.

Looking ahead, Dr. Harvey argued that the long-run goal for EDAM should be the development of financial congestion hedges that do not influence short-run scheduling or bidding decisions. As an interim step, he described a design based on balancing area “flow gate entitlements” — analogous in concept to the approach taken in PJM and MISO — as a potential starting point, noting that it could be adapted to assign congestion rent shortfalls to the responsible balancing area and could provide a foundation for a subsequent transition to a financial rights-based design.

The basic idea of a flow gate entitlement is to negotiate an acceptable share of congestion that each BA is allowed to impose on key transmission lines (gates). For example, PacifiCorp might be entitled to 5% of the congestion revenues (or costs) on CAISOs Path 15. Importantly this congestion allocation would be completely divorced from the actual usage of the network at a specific time, thereby breaking the link between market behavior and revenue allocation that creates incentive problems.

At the March 6 meeting, Milos Bosanac, Manager of Policy Development at the ISO, discussed the nascent plans for a second phase of CRA. Phase 2 is focused on addressing the known limitations of phase 1, including eliminating or reducing self-schedule incentives, supporting robust economic bidding, and creating greater symmetry in the allocation of parallel flow congestion revenues for the CAISO balancing area. Mr. Bosanac also noted that the MSC had recommended in its June 2025 opinion that a negotiated entitlements concept be explored.

He raised several questions that the MSC had identified regarding that concept, including who the relevant parties to negotiations would be given EDAM's unique structure, whether a negotiated entitlement approach could affect or undermine existing operational agreements between balancing areas, and what the appropriate basis for establishing entitlements on specific constraints would be.