

ISO's Responses to Stakeholder Comments for June's report

On July 30, the ISO held a stakeholder meeting to discuss the extended day-ahead market (EDAM) performance in June. This is part of a six-month effort ISO committed to provide timely and transparent information on the EDAM performance after going live.

Four stakeholders submitted written comments, including Six Cities, TEA, Powerex and CPUC staff. Below the original comments are listed followed by ISO's response in blue

Six Cities

1. Please provide your organization's overall feedback on the discussion regarding the Monthly Extended Day-Ahead Market (EDAM) June Performance Report during the Market Performance and Planning Forum Q3 meeting on July 30, 2026.

The Six Cities appreciate the dedicated efforts of the CAISO staff to achieve a generally smooth launch of the Extended Day-Ahead Market ("EDAM") and parallel implementation of the Day-Ahead Market Enhancements ("DAME"). In the Six Cities' experience, market operations have remained reliable. Although the Six Cities, like many market participants, have experienced a significant number of settlements issues, CAISO settlements personnel have been diligent in addressing the problems, and the Six Cities have seen substantial progress in resolving errors and unintended consequences.

ISO's response: [Thank you for the feedback.](#)

The economic impact of the EDAM remains uncertain. As noted at Slide 40 of the presentation for the July 30, 2026 Market Performance and Planning Forum, the EDAM thus far has had no significant impact on total market costs. This observation is consistent with the gross EDAM benefits reported in the Western Energy Markets Quarterly Benefits Report for the 2nd Quarter of 2026 ("the 2nd Qtr. Benefits Report"), available at [western-energy-markets-quarterly-benefits-report-q2-2026.pdf](#). According to that report at page 9, EDAM gross benefits for May and June totalled \$11.38 million for the entire market. Of the total amount, gross benefits to the CAISO BAA were \$5.96 million. However, as reported at Slide 47 of the July 30th presentation, the CAISO BAA transferred \$2.67 million in congestion revenues to PacifiCorp, amounting to about 45% of the attributed gross benefits.

ISO's response: [It is important to distinguish between the impacts of the Extended Day-Ahead Market \(EDAM\) and the impacts of the broader set of Day-Ahead Market Enhancements \(DAME\) that were implemented concurrently on May 1, 2026. While EDAM expanded the day-ahead market footprint to include PacifiCorp balancing authority areas,](#)

several market enhancements were introduced at the same time. Elements such as imbalance reserves are part of DAME, not EDAM. Therefore, care should be taken to attribute costs, benefits and market outcomes to appropriate market design elements.

The concerns expressed by Six Cities appear to be primarily focused on imbalance reserves. Although EDAM utilizes this feature, it is a DAME feature and not an EDAM feature. EDAM would yield benefits regardless of whether the DAME enhancements were implemented. While the level of benefits may be affected based on market features that are incorporated, it is not applicable to attribute all market outcomes, costs, or benefits exclusively to EDAM.

Regarding EDAM benefits, it is also important to recognize that while EDAM benefits are calculated based on production-cost savings, congestion revenues are a settlement construct. Day-ahead market production costs are calculated based on marginal cost to produce energy. Whereas congestion is a settlement construct that quantifies the amount received from load served versus amount paid to supply at locations on the system due to transmission constraints, based on the marginal congestion component of the locational marginal price. Congestion revenue allocation amounts are calculated based on final settlement data that is not included in the production-cost methodology used to estimate EDAM benefits. As a result, congestion revenue and EDAM economic benefits are not directly comparable measure and should not be interpreted as offsetting one another.

The comparison presented by Six Cities illustrates this distinction. For example, day-ahead congestion measured within the ISO balancing authority area during May exceed \$37 million, while estimated EDAM benefits to the ISO balancing authority area were \$5.96 million. If congestion revenues were interpreted as a direct measure of EDAM benefits or costs, it would lead to results that are economically inconsistent as congestion revenues alone substantially exceed the estimated production-cost benefits.

Finally, it is important to highlight the treatment of congestion revenue allocated to PacifiCorp. Prior to EDAM implementation, the ISO did not collect or allocate these revenues. As a result, the reported allocation should not be viewed as a reduction of pre-existing the ISO revenues. The totality of congestion revenues collected, \$37 million, includes new congestion revenue that would not otherwise would have been measured and settled. This represents an additional benefit of EDAM that is not reflected in the production-cost estimates and therefore cannot be considered as offsetting metrics. This illustrates that the two metrics are derived from different analytical frameworks and cannot be used to offset each other.

For these reasons, the ISO believes that congestion-revenue transfers and EDAM production-cost benefits should be evaluated separately and within the context of the distinct methodologies used to calculate them.

The negligible benefits from the initial two months of EDAM operations contrast sharply with reported benefits to the CAISO and PAC BAAs associated with the Western Imbalance Energy Market (“WEIM”) for the same months. WEIM benefits attributed to the CAISO BAA for May and June totalled \$22.65 million, and WEIM benefits to the PAC BAA for the same months totalled \$24.01 million. 2nd Qtr. Benefits Report at 9. In total, WEIM benefits to the two BAAs (associated with approximately 10% of total energy transactions) were 4 times the EDAM benefits (associated with approximately 90% of total energy transactions).

ISO’s response: Comparing WEIM benefits with EDAM benefits requires consideration of important differences in market footprint and market maturity. A more meaningful comparison would be to compare WEIM benefits when its footprint consisted of PacifiCorp and the ISO with the initial EDAM footprint, rather than comparing the current EDAM footprint with a mature WEIM footprint that includes 25 balancing areas. For reference, below is the WEIM benefits estimated at the launch of the WEIM market with PacifiCorp; as the estimates show, the WEIM benefits were a half of the current EDAM market benefits

BAA	November	December	Total
ISO	\$0.65	\$0.59	\$1.24
PACE	\$1.05	\$1.26	\$2.31
PACW	\$1.39	\$1.03	\$2.42
Total	\$3.09	\$2.88	\$5.97

Table 1: Estimated benefits shown are in the millions and accrued for the last two months in 2014.

Six Cities’ comparison does not account for the fact that the EDAM is in its early stages of operations and includes a substantially smaller participant base than the established WEIM footprint. The benefits observed during this initial period should not be viewed as representative of future conditions as the EDAM footprint expands and additional participants join the market.

In addition, these benefits reflect the early stages of EDAM during which the market, market participants, scheduling practices, and operational procedures are still adapting to the new market framework.

Experience from WEIM demonstrates that participation patterns and realized benefits often evolve over time as participants gain familiarity with market rules and opportunities

The Six Cities recognize that the benefits associated with the initial two months of EDAM operations may not be representative of outcomes for a longer time period or a more expansive EDAM footprint. At the same time, the development and implementation of the EDAM design have required extremely high resource commitments by the CAISO itself and by the market participants participating in the markets. An ongoing comparison of costs and benefits is a critical input for guiding prioritization of potential enhancements to the EDAM design as compared with initiatives focused on possible changes to Real-Time market elements or resource development and procurement. In addition, a comparison of costs and benefits accruing to the BAAs participating in the EDAM and the WEIM should guide the allocation of responsibility for market costs going forward. Benefits received from participating in either or both of the EDAM and WEIM should be at least roughly proportional to responsibility for market costs. Accordingly, the Six Cities request that the CAISO include in subsequent reports on EDAM performance: (1) estimates of gross benefits received by each participating BAA expressed both in total dollars and in \$/MW of peak BAA load, and (2) market participation charges collected from each participating BAA by market (EDAM and WEIM), also expressed both in total dollars and in \$/MW of peak BAA load.

ISO's response: The EDAM production-cost benefits reported include the implications of the Day-Ahead Market enhancements implemented concurrently. However, given that the two enhancements were implemented concurrently. Because development, testing, and deployment activities were highly integrated, CAISO cannot reliably distinguish costs attributable exclusively to EDAM from those associated with DAME.

The requested comparison between market benefits and market participation charges does not align with the purpose of the market performance metrics presented in these reports. The material provided here relates to the wholesale costs and benefits of the market. Market participation charges and administrative assessments are designed to recover the costs of operating and maintaining market systems and measure different concepts than production-cost savings and market efficiencies.

In addition, the allocation of market operating costs, including costs recovered through the Grid Management Charge (GMC) structure and other approved cost-allocation mechanisms, is governed through stakeholder and regulatory processes specifically designed to address cost causation and cost recovery. Those processes are distinct from the methodologies used to evaluate market performance and economic benefits. As a result, these costs are distinct from the wholesale market costs used to evaluate the economic efficiency and performance of the market itself.

If scheduling coordinators want to evaluate their bottom line settlement costs and payments, they have all the information needed for this comparison in their settlement statements. Also, the gross EDAM benefit calculation does not account for the efficiency spreading of GMC costs over a larger volume of participation.

Regarding the benefits of DAME and EDAM, Six Cities' view does not fully reflect the broader objectives and benefits of these market enhancements, including improved market efficiency and the explicit pricing of services that were previously not separately valued and the cost of which was reflected in uplift costs to participants. The benefits of these market changes should be evaluated based on their ability to improve commitment, scheduling, and dispatch decisions across the market footprint, rather than solely on changes in individual cost components.

In addition, lower wholesale costs should not be interpreted as evidence that these market enhancements have limited value, to the contrary, lower overall wholesale costs may indicate that the market is producing more efficient and lower-cost outcomes for consumers. Reductions in production costs are generally a primary objective of organized wholesale electricity markets and can be an indicator that market enhancements are functioning as intended. Accordingly, lower wholesale costs are more appropriately viewed as a potential benefit of these market improvements rather than evidence that the underlying enhancements provide limited value.

Six Cities' statements does not fully account for the many differences between current and prior-year periods that can independently affect cost levels. For example, differences in fuel costs from one year to another can materially affect wholesale costs. Similarly, variations in load conditions, hydro availability, resource outages, weather patterns, and transmission constraints can also materially affect market outcomes. The Six Cities' view also does not consider the other cost reductions that could partially or fully offset the net cost impact associated with imbalance reserves. Net costs can be higher or lower than the costs measured directly through individual market settlements because changes in one product or market feature can affect costs associated with other products that are acquired via the market and bi-laterally. Accordingly, evaluating an individual settlement category in isolation may not capture the full economic impacts of the market changes.

Moreover, the costs associated with new market features and products should not necessarily be viewed as entirely new costs. In many cases, these changes increase transparency by explicitly pricing and measuring services that were previously embedded within the broader market outcomes and therefore not separately identifiable. As the EDAM footprint expands, these market enhancements will provide additional opportunities to improve market efficiency by leveraging a larger and more diverse pool of resources, load,

and transmission capability. The resulting geographic and resource diversity can enable lower-cost solutions and improve overall market efficiency.

The Six Cities also request that subsequent EDAM performance reports include additional analysis of the relationships between Imbalance Reserve (“IR”) procurement (including costs of procured IR) and utilization of the resources procured for IR to address uncertainty realized in real-time. Slide 26 of the July 30th presentation reported that capacity procured for IR was utilized to address uncertainty only to a very limited extent. This appears to raise the question whether the procurement metrics for IR are properly targeted to achieve value from IR products commensurate with payments to procured IR resources.

ISO’s response: Thank you for the suggestion. The ISO continues to evaluate the performance of imbalance reserve products, including procurement levels, deployment frequency, and the role these products play in managing forecast uncertainty and maintaining reliability. We appreciate the recommendation and will take it into consideration as we continue to evaluate potential enhancements to future EDAM performance reporting.

TEA

1. Please provide your organization’s overall feedback on the discussion regarding the Monthly Extended Day-Ahead Market (EDAM) June Performance Report during the Market Performance and Planning Forum Q3 meeting on July 30, 2026.

The Energy Authority (TEA) appreciates and has found a lot of value in the comprehensive reporting CAISO has provided on EDAM outcomes to date, which for June included enhanced metrics in response to stakeholder requests made following the May report. TEA also appreciates CAISO’s transparent acknowledgement of ongoing systems and process challenges, and encourages CAISO to continue tracking where issues have been addressed and closed or remain open going forward as the EDAM footprint grows and new challenges are presented. Overall, the metrics and explanations included in the EDAM Performance Report hit the right level of detail for stakeholders to understand trends and have a starting point for digging deeper if interested.

To that point, TEA requests CAISO provide a deeper-dive or spotlight in the following areas for the July report and/or presentation:

- EDAM Transitional Pricing Mechanism –

How frequently, if at all, was transitional pricing applied within the non-CAISO EDAM BAAs in the DAM or RTM, and what impact, if any, did application of that mechanism have on pricing and settlements in each EDAM BAA (including the CAISO BAA)?

ISO's response: Thank you for the recommendation. The July market performance report now includes a section of price discovery during the transitional period.

- *EDAM Self-Schedules –*

Within the data captured to support Figures 134 and 135, what volume of balanced self-schedules are associated with (1) Firm exports, (2) Firm wheelthroughs, (3) Firm imports, and (4) Firm internal schedules (i.e., gen-to-load within the BAA)?

What portion of total generation and imports scheduled to serve on-system load or support Firm exports are self-scheduled (i.e., out of total generation and imports associated with each EDAM BAA, X% is self-scheduled imports-to-load, Y% is self-scheduled internal generation-to-load, and Z% is self-scheduled internal generation-to-export)?

TEA believes this information will be important going forward not just for CRA purposes but more broadly for price formation and intertie scheduling efforts.

ISO's response: Thank you for the suggestion. The ISO has included self-schedules associated with exercising OATTs in PAC areas for supply-to-load schedules, imports, and exports. It has also expanded the metric to include self-schedule volumes not associated with an OATT right; this provides a more comprehensive view of self-schedules. The ISO will evaluate the feasibility and stakeholder value of providing additional self-schedule breakdowns in future reports.

- *Real-Time Market Load Conformance –*

TEA observed that CAISO system operators inserted significant upward load bias in HASP and FMM, but not RTD, during higher-demand periods in July.

What were the drivers of these persistent daily market interventions and why were IRU/RCU schedules combined with DA energy schedules deemed insufficient to meet forecasted demand for the CAISO BAA in HASP and FMM but not RTD?

What impact did these interventions have on (1) CAISO bilateral intertie market imports, (2) CAISO bilateral intertie market exports (e.g., did load-bias result in either/both HPT or LPT export schedule reductions), and (3) WEIM transfer volumes and stability between FMM and RTD?

TEA believes this information will be important going forward for both DAME configurable parameters discussions and interscheduling and/or seams efforts.

ISO's response: For the July report the ISO has added additional discussion regarding load conformance to provide context for observed dynamics. We appreciate the suggestion and will evaluate the feasibility and value of providing additional analysis regarding the drivers and impacts of load conformance actions in future reports.

In addition to the monthly Performance Reports and presentations, TEA has found great value in CAISO staff and EDAM entity and market participant discussions around market performance, outcomes, and challenges at WEM RIF and CAISO Board and WEM GB meetings since go-live. TEA encourages CAISO to continue to find venues for these discussions going forward and consider whether there's a way to capture themes or takeaways from those meetings in these monthly reports, or at a minimum link to the meeting documents and recordings.

ISO's response: Thank you for the feedback. Common analysis and information are leveraged to provide updates through different forums. Given the timing and focus of these forums, analysis may not always align in terms of scope and timing. The ISO remains committed to providing timely and transparent analysis on EDAM performance across a range of topics and forums. The ISO website provides access to published meeting materials and, where available, recordings of the sessions. The ISO will continue to evaluate opportunities to improve stakeholder access to relevant information and analysis presented through these forums.

CPUC

1. Please provide your organization's overall feedback on the discussion regarding the Monthly Extended Day-Ahead Market (EDAM) June Performance Report during the Market Performance and Planning Forum Q3 meeting on July 30, 2026.

Energy Division staff (ED staff or staff) of the California Public Utilities Commission (CPUC) develops and administers energy policy and programs to serve the public interest, advises the CPUC, and ensures compliance with CPUC decisions and statutory mandates. ED staff provides objective and expert analyses that promote reliable, safe, and environmentally sound energy services at just and reasonable rates for the people of California.

ED staff appreciates the opportunity to submit comments on the July 30th Market Performance and Planning. ED staff has a number of questions regarding 1) EDAM performance since go-live and 2) performance data more generally, as discussed in more detail below.

ISO's response: The ISO appreciates the feedback on the various areas. The six-month analysis effort is targeted on EDAM/DAME performance. To remain focused on the primary goal of EDAM/DAME, the ISO will not cover areas that are not relevant to this EDAM/DAME effort, such as the ones related to the Today's Outlook page found on the ISO website. CPUC is encouraged to submit general data requests to the ISO and the ISO will address those through the appropriate effort.

CAISO's Balancing Authority Area (BAA) Supply Stack. It is ED staff's understanding that the renewable supply stack, as shown below, includes out-of-state wind resources, such as SunZia. However, it does not appear that the aggregated supply stack includes other out-of-state resources dedicated to the CAISO, such as Palo Verde and Hoover. For example, the supply stack seems to show the nuclear resources at roughly 2,200 MW, which would include only Diablo Canyon and not the portion of Palo Verde owned by CA IOUs. It seems inconsistent to include out of state wind, but not other out of state resources dedicated to the CAISO, including portions of Palo Verde, Hoover, etc. ED staff is concerned that this overall framing would make it look like CAISO is importing more and exporting less than is actually the case, and would misrepresent the CAISO BAA's reliance on out-of-state resources, as opposed to its reliance on out-of-state resources fully dedicated to the CAISO BAA. ED staff requests that CAISO's ISO Today and other reporting use a consistent approach to resources that have resource ID's identified as dedicated imports, typically psuedotied and dynamically scheduled, but with CAISO-specific resources IDs. As shown in the Table below, there are over 6,165 MW of resources with Resource Type = "TG", sometimes with IDs ending in _DYN that have come online since 1/1/2020. Since not all of these resources are 100% dedicated to the CAISO, there might need to be an additional master file identifier that shows the portion of the resource ID dedicated to the CAISO.

ISO's response: The ISO appreciates the feedback on the various areas on the ED staff comments. The six-month analysis effort is targeted on EDAM/DAME performance. To remain focused on the primary goal of EDAM/DAME, the ISO will not cover areas that are not relevant to EDAM/DAME performance, such as questions on Today's Outlook page found the ISO website.

For questions outside the scope of the EDAM/DAME performance assessment, the ISO encourages stakeholders to submit data requests through the appropriate channels. The ISO will work with stakeholders to address those requests through the relevant processes, subject to resource and data availability.

1. **CAISO's Load Adjustment for "IRU Deficiency" on June 11th.** CAISO's Market Performance and Planning Forum slide 36 states that, "RUC [reliability capacity up] adjustments were applied for CAISO in 19 total hours across June 11 and June 12 up to a maximum of 810 MW. No adjustments were made for other BAAs." On CAISO's Open Access Same-time Information System (OASIS), CAISO reports these RUC load adjustments for June 11th were due to "IRU deficiencies," as shown in the figure below. However, based on ED staff's analysis, it does not appear that there were IRU (Imbalance Reserve Up) deficiencies, as shown in the table below.

Market Balancing Authority Area Group ID	Opr Date	Hour Ending	Interval	Load Adjustment(MW)	Load Adjustment Reason
RUC CISO	06/11/2026	1	0	0	IRU Deficiency
RUC CISO	06/11/2026	2	0	0	IRU Deficiency
RUC CISO	06/11/2026	3	0	0	IRU Deficiency
RUC CISO	06/11/2026	4	0	0	IRU Deficiency
RUC CISO	06/11/2026	5	0	0	IRU Deficiency
RUC CISO	06/11/2026	6	0	0	IRU Deficiency
RUC CISO	06/11/2026	7	0	0	IRU Deficiency
RUC CISO	06/11/2026	8	0	0	IRU Deficiency
RUC CISO	06/11/2026	9	0	273.5	IRU Deficiency
RUC CISO	06/11/2026	10	0	136	IRU Deficiency
RUC CISO	06/11/2026	11	0	810	IRU Deficiency
RUC CISO	06/11/2026	12	0	747	IRU Deficiency
RUC CISO	06/11/2026	13	0	596.5	IRU Deficiency
RUC CISO	06/11/2026	14	0	592.5	IRU Deficiency
RUC CISO	06/11/2026	15	0	212	IRU Deficiency
RUC CISO	06/11/2026	16	0	40	IRU Deficiency
RUC CISO	06/11/2026	17	0	0	IRU Deficiency
RUC CISO	06/11/2026	18	0	182	IRU Deficiency
RUC CISO	06/11/2026	19	0	0	IRU Deficiency
RUC CISO	06/11/2026	20	0	0	IRU Deficiency

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CAISO Public Page 4 BAA	IRU Requirement for HE 14	IRU Award for HE 14	Excess/ Shortage
CAISO	874.53	1,017.13	142.60
PACE	439.51	339.51	-100.00
PACW	42.50	0	-42.50
Total	1,356.54	1,356.64	0.10

Thus, it is not clear why CAISO made a 592.50 MW load adjustment for HE14 (and other hours), when it does not appear that there was an IRU deficiency. ED staff understands that Operating Procedure (OP) 1210 requires CAISO to procure 100 percent of the IRU requirement at the 97.5 percent level when load exceeds 42,000 MW, but the day-ahead load forecast for June 11th was 37,000 MW. Therefore, it would be helpful if CAISO could

explain the reason for the RUC load adjustments on June 11th, specifically for HE14, but for the other hours as well.

ISO's response: The calculation provided in the CPUC staff comments is erroneous. June 11 and August 4 appear to not follow the methodology specified in the EDAM Business Practice Manual (BPM) and Operating Procedure (OP) 1210 for calculating RUC load adjustments.

The CPUC's examples do not use the correct inputs required for the RUC adjustment calculation, including the applicable 97.5th percentile imbalance reserve requirement used in accordance with OP 1210. This process was fully vetted and socialized prior to go live, including through stakeholder discussions and training sessions. The current process documentation also reflects stakeholder feedback, including the CPUC staff's.

Currently, the material available includes:

1. The BPM for EDAM in section 22.4.1, which describes the logic for RUC adjustments and provides a numerical example adjustment process. The inputs are the percentage of the full Imbalance Reserve that will be added to the RUC load adjustment based on peak load level bands less the Imbalance Reserves procured in IFM. The full imbalance reserves used in this RUC adjustment process are based on the dynamic threshold set at the 97.5th percentile. This table is shared with each EDAM participant securely.
2. OP 1210, which provides the matrix defining the peak-load thresholds used to determine the percentage of IR at the 97.5th percentile imbalance reserve requirement applied in the adjustment calculation:

Peak Load	Percent of Max IR requirement	Hour Ending Applied
<29,999	0%	All
30,000 to 31,999	4%	7,8,9,15,16,17,18
32,000 to 36,999	4%	7 through 22
37,000 to 41,999	50%	7 through 22
>42,000	100%	7 through 22

The inputs are the percentage of the full Imbalance Reserve that will be added to the RUC load adjustment based on peak load level bands less the Imbalance Reserves procured in IFM. The full imbalance reserves used in this RUC adjustment process are based on the dynamic threshold set at the 97.5th percentile.

3. CAISO training sessions and material, as well as the BPM for Market Operations, which describe the various data points for Imbalance reserve available through OASIS.

Together, these materials describe the methodology and data inputs used to calculate RUC adjustments.

Using this methodology, the June 11 RUC adjustment is derived as follows:

- Because June 11 peak was between 37,000MW and 41,999MW, the matrix in OP 1210 specifies the applicable requirement is 50% of the full 97.5th percentile imbalance reserve requirement.
- The full 97.5th percentile requirement available in OASIS was 3,219.3 MW; applying the 50% factor results in a target of 1,609.6 MW.
- The cleared IR quantity in IFM was 1017.3 MW. Therefore, the RUC adjustment is 592.3 MW=1609.6-1017.3, which matches the value used in the market and posted on OASIS.

Accordingly, the June 11 adjustment reflects the application of the methodology described in the BPM and OP 1210.

Additionally, the imbalance reserve requirement target used clear in the integrated forward market is initially based on 90% percentile requirement rather than the 97.5th percentile requirement. This approach was the result of extensive stakeholder discussions during the configurable parameters initiative, including requests from stakeholders for values below the full 97.5th percentile requirement at the beginning of EDAM operation.

2. CAISO's Load Adjustment for "IRU Deficiency" on August 4th. Similar to the last question, CAISO made very large RUC adjustments for IRU deficiencies on 8/4 (see figure below). ED staff had assumed that these adjustments were because of CAISO OP1210, which requires CAISO to procure IRU at the 97.5 percent uncertainty level, but the adjustments shown below seem larger than one would expect, based on the analysis shown in the table below.

[OASIS](#)
[Atlas Reference](#)
[Report Definition](#)
[Prices](#)
[Transmission](#)
[System Demand](#)
[Energy](#)
[Ancillary Services](#)
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Date From: 08/04/2026 To: 08/04/2026 Market/Process: RUC BAA Group ID: [ALL]

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Load Adjustments

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Market	Balancing Authority	Area Group ID	Opr Date	Hour Ending	Interval	Load Adjustment(MW)	Load Adjustment Reason
RUC	CISO		08/04/2026	1	0	0	IRU Deficiency
RUC	CISO		08/04/2026	2	0	0	IRU Deficiency
RUC	CISO		08/04/2026	3	0	0	IRU Deficiency
RUC	CISO		08/04/2026	4	0	0	IRU Deficiency
RUC	CISO		08/04/2026	5	0	0	IRU Deficiency
RUC	CISO		08/04/2026	6	0	0	IRU Deficiency
RUC	CISO		08/04/2026	7	0	1795	IRU Deficiency
RUC	CISO		08/04/2026	8	0	1182	IRU Deficiency
RUC	CISO		08/04/2026	9	0	2782	IRU Deficiency
RUC	CISO		08/04/2026	10	0	3011	IRU Deficiency
RUC	CISO		08/04/2026	11	0	3218	IRU Deficiency
RUC	CISO		08/04/2026	12	0	2288	IRU Deficiency
RUC	CISO		08/04/2026	13	0	1482	IRU Deficiency
RUC	CISO		08/04/2026	14	0	1270	IRU Deficiency
RUC	CISO		08/04/2026	15	0	1273	IRU Deficiency
RUC	CISO		08/04/2026	16	0	1328	IRU Deficiency
RUC	CISO		08/04/2026	17	0	2188	IRU Deficiency
RUC	CISO		08/04/2026	18	0	3590	IRU Deficiency
RUC	CISO		08/04/2026	19	0	1193	IRU Deficiency
RUC	CISO		08/04/2026	20	0	1617	IRU Deficiency

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CAISO Public Page 5	IRU Requirement	IRU	Excess/Shortage
BAA	for HE 18	Award for HE 18	
CAISO	896.12	1,215.58	319.46
PACE	275.59	0	-275.59
PACW	43.68	0	-43.68
Total	1,215.39	1,215.58	0

Thus, for the 90 percent uncertainty requirement, it appears that the system is fully resourced, with the CAISO long position equaling PACE and PACW short position. However, CAISO procured an additional 3,590 MW for HE18 on August 4, which is 4 times as much of the requirement. It is difficult to understand how moving from the 90 percent uncertainty to the 97.5 percent uncertainty would increase the requirement nearly fivefold (i.e., from ~900 MW to 4,400, or ~900 MW + ~3600 MW). It would be helpful if CAISO could explain how it arrived at the IRU deficiencies on August 4.

ISO’s response: Using the response from previous item, the August 4 RUC adjustment is derived as follows:

- Because August 4 peak was over 42,000 MW, the matrix in OP 1210 specifies the applicable requirement is 100% of the fully 97.5th percentile imbalance reserve requirement.
- The full 97.5th percentile requirement available in OASIS is 4,486.9 MW ; applying the 100% factor results in a target of 4,486.9 MW.
- The cleared IR in IFM was 896.1 MW
- Therefore, the RUC adjustment is 3,590 MW=4,486.9-896.1, which matches the value used in the market and posted on OASIS.

Please note that the IR cleared considered is 896.1 MW rather than the 1,215.5 MW. After the ISO observed the results of June 11, the ISO adjusted the calculation onward to use only the IR cleared to meet CAISO requirements. This does not include the IR cleared to support transfers since the market optimized those to meet other areas requirements, because the RUC adjustment is area specific rather than system-wide adjustment.

3. The 97.5 Percent Uncertainty Level for IRU. It would be helpful if CAISO could identify where in OASIS it provides the 97.5 percent uncertainty quantity. If this is the histogram, can CAISO explain how to use it (e.g., does one use the net demand or need to sum certain figures)?

ISO's response: Prior to EDAM go-live, the ISO expanded the Appendix information in the BPM for Market Operations to describe the imbalance reserve requirement thresholds posted in OASIS, including 97.5th percentile values used in the EDAM and DAME processes. This information was discussed through the BPM stakeholder process prior to go live.

For specific data referenced in the comment, the 97.5th percentile imbalance reserve requirement is available on the ISO OASIS:

Energy → Imbalance Reserve → Imbalance Reserve Requirement Thresholds.

Within that report, the "Histogram" values represent the upper (97.5th percentile) and lower (2.5th percentile) imbalance reserve requirement thresholds. These values are the inputs used in the RUC adjustment methodology described in the BPM and Operating Procedure 1210.

4. Counterfactual Market Results. At either the Western Energy Markets (WEM) or the Joint WEM/CAISO Board meeting, one of the board members asked whether CAISO had run a counterfactual comparing the CAISO day-ahead market results with the EDAM day-ahead market results and CAISO indicated that it had done so. Would it be possible for CAISO to provide these results at the next Market Performance and Planning meeting?

ISO's response: During the June Governing Body session, ISO staff responded to a question regarding the relative impact of imbalance reserves (IR) on energy prices. ISO staff explained that, following go-live, the ISO conducted limited reruns for select days in early May with a counterfactual that removed imbalance reserve requirements in order to better understand their impact on market outcomes, including energy prices.

ISO staff further noted that in the early May period included several implementation and transition-related considerations that may affect the usefulness of those results as a representative benchmark. Accordingly, a more meaningful assessment would likely focus on a later period that provides more stable operating baseline.

The ISO appreciates the interest in counterfactual analyses and recognizes their value in understanding market impacts. The ISO will evaluate the feasibility and stakeholder value of incorporating additional counterfactual assessments into future market performance analyses and stakeholder discussions.

5. Hourly Virtuals or Hourly Net Virtuals. Can CAISO explain whether it is possible to determine virtual supply and virtual demand that clears on an hourly basis from the information posted on OASIS? If not, would it be possible to post this information? In addition, can CAISO explain whether it is possible to determine net virtual supply from OASIS, under "Energy Schedule, System Load and Resource Schedules" (i.e., are net virtuals = load + exports - generation – imports)? And if not, why not?

ISO's response: The ISO posts aggregate awards by hour on OASIS at Energy → Convergence Bidding Aggregated Awards

6. Availability of IRU in the Real-Time. In its presentation, CAISO indicated that the availability for IRU in the real-time is only 80 percent. Can CAISO explain why this occurs?

ISO's response: The ISO continues to assess the performance of imbalance reserves and gradually expands the scope of its analysis; any additional analysis in this area will be included in future reports.

7. Cost Attribution for RCU. Is there any way to tell from OASIS data reporting if RCU is procured because of underbid load or because of net virtual supply? If so, can CAISO provide an explanation of how this is done? If not, could CAISO include this in its monthly reports?

ISO's response: RCU is procured based on several factors including load forecast, virtual awards, RUC adjustments, economic bids and locational prices and the economics of transferring RC to other EDAM entities so the cost or quantity attribution cannot be traced to a specific factor.

8. Color Coding in the Market Performance and Planning Forum Presentation. Could CAISO use consistent color classification treatment on slides 23 and 29? Having different colors makes it difficult to compare the BAAs each against other when color coding is different for the same data across the BAAs.

ISO's response: Thank you for the suggestion; the ISO will take this for further consideration.

Powerex

1. Please provide your organization's overall feedback on the discussion regarding the Monthly Extended Day-Ahead Market (EDAM) June Performance Report during the Market Performance and Planning Forum Q3 meeting on July 30, 2026.

Powerex appreciates the California ISO's efforts to provide information regarding the performance of EDAM. These comments focus on information in the monthly report related to the collection and allocation of congestion revenues, and on the value and allocation of transfer revenues.

Reporting of Congestion Revenue Based on the Area Where Market Participants Paid the Congestion Cost

At page 124, the report states that "[t]otal EDAM congestion revenues in June were \$37.9M." Figure 131 provides the daily congestion revenues, based on "where the congestion is sourced," which Powerex understands to refer to the BAA where the binding constraints producing the congestion revenue are located. Virtually all of the June total is reported as being sourced from constraints located in the California ISO BAA, which is consistent with historical analyses of WEIM data published by the California ISO in other stakeholder proceedings.

ISO's response: Most, but not all, congestion arose from ISO constraints. The report provides already a clear breakdown with the ISO congestion at \$37.9 million and PAC congestion at \$285k.

The report also provides information on the allocation of congestion revenues under the transitional approach, which allocates congestion back "to the areas where market participants paid the congestion costs ... if they are associated with exercised transmission rights and self-scheduled transactions." Under this transitional methodology, the report states that "Returns to PAC areas from CISO congestion totaled \$1.34M in May and \$1.33M in June."

Powerex appreciates the reporting of the total congestion revenues collected by market settlements, and the allocation of those revenues under the current transitional approach.

Powerex would appreciate more information, however, as it is unclear how much of the \$37.6 million in congestion revenues associated with constraints in the California ISO BAA were paid by market participants in PacifiCorp West and in PacifiCorp East.

ISO's response: Thanks for the suggestion; this is an active area of analysis, and the ISO will take this suggestion for further consideration to expand the material.

Figure 132 of the report is described as providing "the breakdown of net-total congestion rents in the CISO area associated with parallel [flows] from PAC areas." These "net-total congestion rents" are reported as \$598k and \$958k in May and June, respectively. It is unclear whether this is intended to reflect the total congestion paid in PAC associated with parallel flows, or whether it represents the parallel flow congestion costs paid by market participants in PacifiCorp *after* accounting for the transitional allocation.

This ambiguity makes it difficult to evaluate the extent to which the \$1.34 million and \$1.33 million returned to PacifiCorp in May and June offset the new congestion payments made by PacifiCorp customers to the California ISO as a result of participating in EDAM.

ISO's response: The metric is intended to capture all congestion revenues from PacifiCorp resulting from congestion on ISO constraints. This includes the portion of those revenues that is subsequently allocated back to PacifiCorp, which is reported separately under a different metric.

Part of the confusion stems from an issue with the settlement estimates used for the congestion allocation, which caused the figures to not align across the different reporting breakdowns. These estimates have since been revised and are reflected in the July report.

Powerex requests that future monthly EDAM performance reports more clearly break down the total congestion revenues by the area where market participants paid the congestion costs. Specifically, Powerex requests that the report contain (1) the parallel flow congestion costs paid by market participants in PacifiCorp's area as a result of settling generation and demand at the applicable LMP; and (2) any offsets to those costs returned to each PacifiCorp area under the transitional allocation. Ideally this would be further categorized by the congestion costs associated with the scheduled use of firm OATT rights and congestion revenues associated with other EDAM transactions. This information will help inform stakeholders evaluating potential proposed changes to the transitional allocation.

ISO's response: Thanks for the suggestion; this is an active area of analysis, and the ISO will take this for further consideration for future reports.

Reconciliation of Different Congestion Estimates

Table 9, on page 119, reports the “Average MCC (\$/MWh)” for the DLAP or ELAP associated with PacifiCorp West, PacifiCorp East, PG&E and SCE. Table 11, on page 121, “reconstruct[s] the monthly average MCC in the previous figure, but with a breakdown where the congestion is occurring.” The values in Table 11 do not add up to the values in Table 9, however, and in certain instances the differences appear to be large. For example, Table 9 reports that the average MCC for PACE in May was $-\$0.8/\text{MWh}$, whereas Table 11 appears to show constraint- and case-specific contributions to that MCC that sum up to $-\$0.2/\text{MWh}$.

Powerex asks the California ISO to clarify whether the components in Table 11 should, in fact, sum up to the value in Table 9. If so, then Powerex suggests that revised numbers be provided with the next monthly report. If not, then Powerex suggests that the report provide additional explanation to clarify the different concepts being presented.

ISO’s response: The ISO described in the first two reports a series of issues that affected various aspects of the market solution and settlement processes at the time the reported metrics were generated. Some of these issues specifically affected congestion, including the issue related to missing shift factors.

When shift factors are missing, or when other issues affect market prices, differences can arise between the various estimates and reported values. The ISO proactively cautioned about these potential discrepancies in the June report through a footnote below Table 11, noting that the reported metrics could be affected by these underlying market and settlement issues.

Reporting of EDAM Transfer Revenues

The report contains extensive information regarding the volume of EDAM transfers, but contains no information regarding the value of these transfers or any associated transfer revenue. The Marginal Cost of Energy in different EDAM BAAs can and has diverged, sometimes significantly, implying the collection of transfer revenue that, under the EDAM tariff, is split between the EDAM entities on either side of the transfer.

Powerex requests that future monthly reports contain information on the value and allocation of EDAM transfers between BAAs.

ISO’s response: Thanks for the suggestion; this is an active area of analysis, and the ISO will take this for further consideration for future reports.