

Day-Ahead Sufficiency

Straw Proposal

May 2024

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Introduction

The California Independent System Operator (CAISO) is preparing to launch its Extended Day-Ahead Market (EDAM) in the spring of 2026. The day-ahead sufficiency initiative¹ focuses on an important element of EDAM design, the resource sufficiency evaluation (RSE).² The RSE is intended to motivate Balancing Authority Areas (BAAs) participating in EDAM to come to the market with sufficient supply to meet their next-day obligations prior to engaging in transfers with other participating BAAs. By requiring each participating BAA to demonstrate sufficient forward procured supply each day, the EDAM RSE discourages BAAs with insufficient resources from inappropriately leaning on neighboring BAAs for supplemental capacity.

As established in the EDAM design, the RSE will be conducted each day at 10 a.m., prior to running the day-ahead market. The RSE will evaluate each BAA's offered supply³ against its demand forecast, imbalance reserve requirements⁴ and ancillary services requirements across the 24 hourly intervals of the day-ahead market. ⁵ To perform the evaluation, the RSE application will model each BAA's entire load and supply on a single bus (i.e., without transmission constraints) and perform a unit commitment optimization. If the optimization does not relax constraints to solve, then the BAA "passes" the RSE. If the optimization is required to relax constraints to solve, then the BAA "fails" the RSE. Failures can be in the upward and/or downward direction. An upward failure occurs when the optimization must relax the upward power balance constraint, upward imbalance reserve procurement constraint and/or upward ancillary services procurement constraint. A downward failure occurs when the optimization must relax

¹ The day-a head sufficiency initiative replaces and renames track A2 of the <u>EDAM ISO BAA participation rules</u> initiative. The CAISO's <u>resource a dequacy modeling and program design</u> initiative will explore two additional topics that were formerly scoped as part of track B of the EDAM ISO BAA participation rules initiative: (1) allocating CAISO BAA RSE failure surcharges and revenues, based on causation; (2) developing a new product and solicitation process to cure expected CAISO BAA RSE shortfalls, with an associated cost allocation methodology.

² This straw proposal will refer to the EDAM RSE as "RSE." The resource sufficiency evaluation in the Western Energy Imbalance Market will be referred to as the "WEIM RSE."

³ For variable energy resources (VERs), the RSE will take into account the full VER forecast. See EDAM Tariff Section 33.31.1.

⁴ Imbalance reserves are a new day-ahead market product that the CAISO will implement as part of its <u>day-ahead</u> <u>market enhancements initiative</u>. When implemented, the day-ahead market will procure imbalance reserves up and imbalance reserves down to meet the range of expected imbalances between the day-ahead and real-time net load forecasts.

⁵ For the CAISO BA, RSE obligations will also include any self-scheduled volumes of high priority exports to non-EDAM BAAs. For the CAISO BA, RSE-eligible supply will include forward-contracted intertie resources, pseudo-tie resources and all CAISO-BA located resources, unless contracted to a non-CAISO EDAM BAA through an EDAM bucket 1 transfer.

the downward power balance constraint, downward imbalance reserve procurement constraint and/or downward ancillary services procurement constraint. The optimization will seek to minimize the sum of the constraint relaxation quantities across the 24 intervals. Figure 1 illustrates the RSE process, applied to the CAISO Balancing Authority (BA).

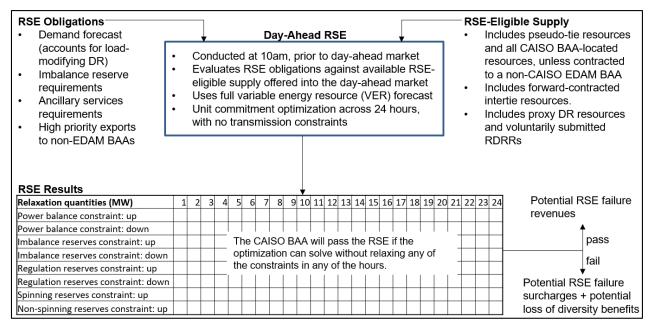


Figure 1: RSE Applied to CAISO BA

BAAs that fail the RSE in any hour of the 24 hour evaluation may incur at least one of the following types of financial surcharges: (1) on-peak upward failure surcharges; (2) off-peak upward failure surcharges; (3) downward failure surcharges. BAAs that fail the RSE by a *de minimis* amount will not be subject to financial surcharges. Upward failure surcharges are calculated on a tiered structure that incorporates the magnitude of the failure and any persistence in upward failures over a rolling thirty-day period. The downward failure surcharge is not tiered. In addition to incurring financial surcharges, deficient BAAs may be removed from the pool of passing entities and may lose diversity benefits in real-time. More specifically, BAAs that are deficient after the integrated forward market (IFM), ⁶ or otherwise fail to

⁶ The integrated forward market (IFM) is the engine of the day-ahead market. It is a financial market where bid-in supply clears against bid-in load and ancillary service requirements. The IFM co-optimizes procurement of energy and ancillary services for each operating hour of the trading day seeking to minimize overall procurement costs, while respecting transmission constraints and inter-temporal resource constraints such as minimum run time and start-up time. Beginning in the spring of 2026, the IFM will also procure and co-optimize imbalance reserves, as detailed in the CAISO's day-ahead market enhancements initiative.

comply with the tagging requirements, will be evaluated individually in the western energy imbalance market (WEIM) RSE. BAAs that are sufficient and comply with the tagging requirements will be pooled together and evaluated as a whole.

As an EDAM participating BAA, the CAISO BA needs to establish a process to evaluate actions to meet the BA's RSE obligations at or before 10 a.m. each morning. The EDAM RSE application will utilize resource bids and self-schedules to determine feasible operating schedules, and satisfying the RSE obligations is indicative of expected system reliability. As part of this process, the CAISO BA must be able to quantify its RSE position with enough time to take actions to ensure reliability if there is a significant projected shortfall. The best opportunity for the CAISO BA to quantify its RSE position is at approximately 9 a.m., when its demand forecast, variable energy resource forecasts and reserve requirements are final, a significant portion of day-ahead supply offers have been submitted, and advisory RSE results are published. If there is a projected RSE shortfall at 9 a.m., the CAISO BA will still have approximately one hour to take action to attempt to cure any projected failures in support of system reliability. For this reason, the day-ahead sufficiency initiative will focus on helping the CAISO BA quantify each morning at 9 a.m. whether it is on track to meet its RSE obligations. To that end, this initiative will address five topics, and this straw proposal dedicates chapters to each of them:

- 1. Ensuring the 9 a.m. advisory RSE results provide an accurate assessment of expected CAISO BA supply and demand obligations to support reliable operation
- 2. Accounting for reliability demand response resources
- 3. Accounting for strategic reliability reserve resources
- 4. Curing reliability concerns if there are remaining upward RSE shortfalls
- 5. Incentives for tagging day-ahead imports

Chapter 1: Making the 9 a.m advisory RSE results more meaningful

To quantify its 9 a.m. RSE position, the CAISO BA will first examine its 9 a.m. advisory RSE results. As established in the EDAM design, the advisory RSEs are non-binding RSE runs that participating BAAs can access before 10 a.m. For each BAA, the advisory RSE results will show whether the BAA can meet its energy, imbalance reserve and ancillary services requirements. The results will show whether the BAA is

deficient in the upward and/or downward direction for each of the 24 intervals of the day-ahead market as well as the magnitude of any projected failures. An upward deficiency means the BAA has not provided sufficient RSE-eligible supply to meet its upward energy requirements, upward imbalance reserve requirements and/or upward ancillary services requirements. A downward deficiency means the BAA has not provided sufficient RSE-eligible supply to meet its downward energy requirements, downward imbalance reserve requirements and/or downward ancillary services requirements. ⁷

At 9 a.m. each day, the CAISO BA will use its advisory RSE results and determine gross upward shortfalls by adding the upward deficiencies, if any, in each hour. The upward deficiencies will consist of the relaxation quantities for the upward power balance constraint, upward imbalance reserve procurement constraint and upward ancillary services procurement constraints.⁸

The advisory RSE results provide a starting point to quantify the CAISO BA's 9 a.m. RSE position, but they may not accurately represent all RSE-eligible supply that will become available to the CAISO BA by 10 a.m. This is because the advisory results will not reflect volumes associated with offers submitted into the day-ahead market after 9 a.m. For the CAISO BA, such volumes may be significant. CAISO load-serving entities are required to procure forward capacity, called resource adequacy (RA) capacity, and demonstrate such capacity to the CAISO in year-ahead and month-ahead RA compliance filings. ⁹ The majority of this shown RA capacity must then be offered into the day-ahead market by 10 a.m. ¹⁰ For this reason, the 9 a.m. advisory RSE results may fail to fully reflect volumes associated with day-ahead supply offers that are expected and required by 10 a.m.

⁷ For example, during over-supply conditions when imbalance reserve down requirements cannot be met due to a high volume of self-schedules.

⁸ For the purpose of calculating a 9 a.m. RSE position, it is reasonable to take the sum of these relaxation quantities and treat energy, imbalance reserves and ancillary services interchangeably. It is reasonable to treat these RSE obligations interchangeably because the awarded supply for one type of obligation will likely free up supply for another type of obligation in the co-optimization.

⁹ The CAISO's resource a dequacy tariff provisions require load serving entities in the CAISO BAA to submit a year-ahead forward showing and month-ahead showings of the capacity procured to meet their share of the peak load plus any applicable reserve margin, as well as local and flexible capacity requirements.

¹⁰ There are exemptions to the RA day-ahead must offer obligations. For example, eligible intermittent resources may, but are not required to submit day-ahead offers.

Figure 2 provides a breakdown of the RA capacity offered into the day-ahead market in July 2023. ¹¹ The chart shows that across the 31 days of July, approximately 75% of the capacity was offered by 9 a.m. In other words, approximately 25% of the capacity was offered after 9 a.m. and would not have been reflected in the 9 a.m. advisory RSE results had EDAM been live in July 2023. This is a substantial amount of available RSE-eligible capacity that should not be ignored. The chart also provides detail on the resource fuel types. Of the capacity offered after 9 a.m., the majority was natural gas-fired capacity, followed by energy storage capacity and hydroelectric capacity.

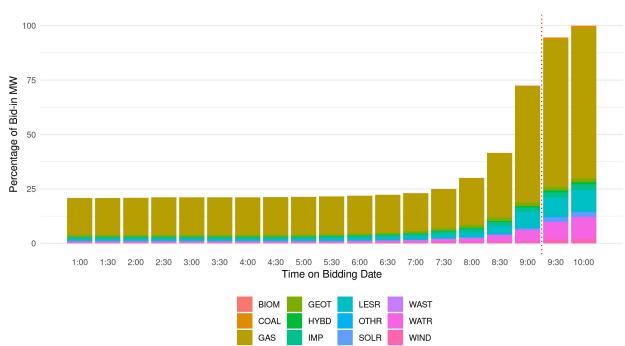


Figure 2: RA capacity offered into day-ahead market by time stamp, July 2023

The objective of this policy is to make the 9 a.m. advisory RSE results as helpful and accurate as possible. To the extent market participants are able to voluntarily submit day-ahead offers by 9 a.m., this will help increase the accuracy of the RSE assessment. This would not prevent scheduling coordinators from further updating their offers until the day-ahead market close at 10 a.m.. To the extent these offers are not present at 9.am., the CAISO BA will need to take remedial actions to increase the accuracy of the evaluation.

¹¹ The CAISO chose July as a reasonable representation of the summer months, when RA capacity is most critical.

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The CAISO proposes to use a combination of three ideas to ensure an accurate and complete RSE assessment. First, the CAISO encourages (but does not require) resource scheduling coordinators to submit all day-ahead offers by 9 a.m. To the extent this can be done, it will improve the accuracy of the 9 a.m. advisory RSE. Importantly, scheduling coordinators will be able to modify these day-ahead offers until 10 a.m.

Second, for RA resources that <u>are</u> subject to bid-insertion¹², the CAISO proposes to insert day-ahead offers at 9 a.m. if there is no existing offer. This 9 a.m. day-ahead bid-insertion process will ensure that this specific subset of RA resources is reflected in the 9 a.m. advisory RSE. The CAISO will use default energy bids for the price. ¹³ Importantly, scheduling coordinators will be able to over-write these inserted offers any time before 10 a.m.

Third, for RA resources that <u>are not</u> subject to bid-insertion, the CAISO proposes to insert advisory offers at 9 a.m when there are no existing offers. Importantly, the CAISO will only use these advisory offers for the 9 a.m. advisory RSE and will then discard them by 10 a.m. Scheduling coordinators will continue to be responsible for meeting their day-ahead must offer obligations by 10 a.m. When inserting advisory offers, the CAISO proposes to use \$0 bid prices and each resource's RA capacity. Examples of RA resources that fall into this category are use-limited gas resources, hydroelectric resources, proxy demand resources, and non-generator resources (NGRs), including hybrid resources. ¹⁴ The CAISO will not need to insert advisory offers for eligible interimittent resources because the CAISO will reflect RA eligible intermittent resources in the 9am advisory RSE using the VER forecast.

Figure 3 illustrates the CAISO proposals described above. Together, these proposals will ensure that the CAISO BA's 9 a.m. advisory RSE is based on a comprehensive set of inputs that accurately reflects all of the RA supply expected by 10 a.m. This will enable the CAISO BA to accurately assess whether expected available and committed capacity will pass the binding RSE at 10 a.m.

¹² For more information on which specific resource types are subject to RA bid-insertion rules, please refer to section 7.1.1 in the reliability requirements business practice manual.

¹³ Default energy bids, calculated by the CAISO for each resource, are an estimate of a resource's costs and used for local market power mitigation.

¹⁴ For a detailed list of which specific RA resource types are <u>not</u> subject to bid-insertion rules, please refer to section 7.1.1 in the reliability requirements business practice manual.

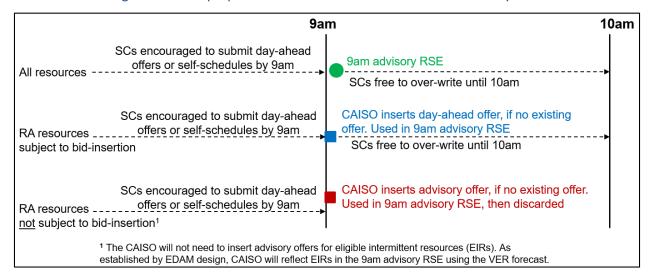


Figure 3: CAISO proposals to enhance the CAISO BA 9 a.m. advisory RSE

Chapter 2: Accounting for demand response resources

Chapter 2.1: Reliability Demand Response

Reliability demand response resources (RDRRs) are a unique type of RA supply, available for use by the CAISO BA when the BA has declared an Energy Emergency Alert (EEA) Watch or higher. ¹⁵ Investorowned utilities overseen by the California Public Utilities Commission manage RDRRs, which consist primarily of base interruptible program customers and agricultural and pumping loads. RDRRs are supply-side resources, offered directly into the market, and therefore are not reflected in the CAISO BA demand forecast adjustments.

In the CAISO BA, RDRR capacity is not shown on RA supply plans but instead is credited as reduction to the RA supply obligation for the applicable load-serving entities. RDRRs may voluntarily submit offers into the CAISO day-ahead market, but they are not required to do so. RDRRs are required to submit real-time offers into the market at between 95% and 100% of the applicable bid cap. ¹⁶ These RDRR offers are released into the CAISO's real-time market in conjunction with a declared transmission emergency, Energy Emergency Alert (EEA) Watch or other EEA notice. The EDAM policy design permits demand

¹⁵ The RDRR participation model is available to other WEIM BAAs. This issue paper discusses how the CAISO BA will use the California RA RDRR in its RSE.

¹⁶ CAISO Tariff section 30.6.2.1.2 Real-Time Dispatch Options

response programs that are not otherwise reflected in the day-ahead market through bids, including those that are accessible only during declared specific conditions such as EEA notifications, to count for the day-ahead RSE. 17

The EDAM design provides for accounting of RDRR in the EDAM RSE. Since RDRR will contribute to the CAISO BA passing the RSE, the CAISO BA should not utilize the market, whether through energy, imbalance reserve or reliability capacity transfers from EDAM BAAs, to obviate its need to potentially utilize RDRR to the extent that forecasted conditions warranting their use materialize.

If the 9 a.m. advisory RSE for the CAISO BA at indicates an upward RSE shortfall in one or more intervals and the CAISO BA expects emergency conditions in real-time, then the CAISO BA may account for RDRR in the RSE at the discretion of CAISO BA system operators. This adjustment is appropriate because it would allow the CAISO BA to account for RDRR capacity, which is a subset of RA capacity. ¹⁸ Importantly, the adjustment would be limited to the available RDRR capacity that did not submit a day-ahead offer by 9 a.m. Any available RDRR capacity offered into the day-ahead market by 9 a.m. would already be reflected as RSE-eligible supply. In addition, the CAISO BA would only make this adjustment to the extent it reasonably expects emergency conditions to materialize in real-time based on its existing and anticipated supply conditions.

The CAISO BA will account for the potential use of RDRR in the formulation of any bias in the residual unit commitment (RUC) process. For example, if the CAISO BA needs 2,000 MW of upward load forecast adjustment to account for potential outage uncertainty and fire risk and the CAISO BA is accounting for 500 MW of RDRR that was not bid into the IFM but is available in real-time, then the CAISO BA would only make a 1,500 MW RUC adjustment instead of 2,000 MW, thus accounting for the use of 500 MW of RDRR. This practice helps ensure that the CAISO BA does not lean on reliability capacity transfers from other EDAM BAs to obviate the need for the CAISO BA to operationalize the RDRR resources in real-time.

¹⁷ Extended Day Ahead Market (EDAM) Final Proposal, page 69 (December 7, 2022).

¹⁸ This is also reflected in the EDAM design. See proposed EDAM tariff 33.31.4.1.

The CAISO plans to monitor the physical load bidding practices in the IFM to ensure that load is not regularly bid in excess of physical supply available to the CAISO BA. This physical supply is inclusive of both supply counted for the purposes of the RSE as well as voluntary intertie supply offers made at the CAISO BA's borders. To the extent intertie supply offers exceed the RDRR forecast adjustment, the day-ahead market results may avoid the type of real-time conditions that will trigger RDRR through scheduling supply available to the CAISO BA that was not accounted for in the EDAM RSE. Functionally, RDRR's availability in the real-time market to address any conditions provides a relability backstop on this additional non EDAM RSE supply.

Previous analysis has indicated that during expected strained operating conditions, load in the IFM has been underbid compared to load that materializes in the real-time market. An example of this can be found in the CAISO's Summer Market Performance Report for September 2022¹⁹ in Figure 31; that figure is included below as Figure 4 for context. The figure shows systemic underbidding of between approximately 600 MW and 1,400 MW of load during stressed system operating conditions. These quanities of under-bid demand are within the range of expected RDRR program participation. The CAISO will monitor the usage of RDRR to ensure it remains consistent with the EDAM policy.

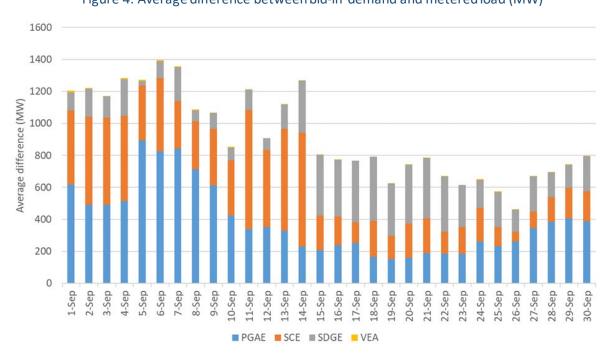


Figure 4: Average difference between bid-in demand and metered load (MW)

¹⁹ CAISO Summer Market Preformance Report for September 2022

Neither of these practices guarantees that if the CAISO BA accounts for RDRR in its RSE, the RDRR programs will be dispatched in real-time; the RDRR trigger is determined by real-time reliability conditions (transmission emergency or energy emergency alert). Forecast conditions, e.g., resource availability, load or VER changes, intertie supply offers, or other operating conditions, can change between day-ahead and real-time. Such factors may prevent real-time emergency conditions and therefore the need to dispatch RDRR resources. The proposal here is simply to ensure that EDAM market transfers from other participating EDAM BAAs are not inappropriately used to backfill and prevent the CAISO BA from having to use its RDRR resources.

The CAISO requests feedback on its proposed accounting of RDRR in the RSE, especially comments on the following:

- 1. The CAISO BA will need information each morning to calculate the quantity of available RDRR capacity that has not voluntarily submitted a day-ahead offer as of 9 a.m. While these programs have a resource adequacy capacity value, the CAISO BA must know and ensure potential adjustments reflect actual expected resource availability. Will this information be readily available to the CAISO BA on a daily basis, and how?
- 2. RDRR scheduling coordinators are able to voluntarily submit day-ahead offers and will continue to do so under the EDAM design. However, the CAISO BA will perform its RSE adjustment based on the 9 a.m advisory RSE and wants to ensure it does not inadvertently double count any supply offers submitted between 9 and 10 a.m. How best can the CAISO BA ensure the RDRR supply is not inadvertently double counted in this manner?
- 3. The CAISO would like to discuss how energy limits to RDRR capacity (i.e., maximum run times, maximum starts per day) should be reflected in the RSE adjustment. More specifically, if the CAISO BA at 9 a.m. expects upward RSE shortfalls in multiple intervals, for which intervals should the RSE be reduced, and/or are there any specific intervals the CAISO BA should limit reductions to?

Chapter 2.2: Proxy Demand Resources and Load Modifying Demand Response

There are two other types of demand response resources that should be considered in the context of the RSE. First, proxy demand resources providing RA have a must-offer obligation into the day-ahead market, and the CAISO BA will count such day-ahead offers as RSE-eligible supply. Second, load-modifying demand response will be reflected as a reduction to the CAISO BA day-ahead demand forecast when it has been communicated to the CAISO in the pre-day-ahead time frame as certain to be curtailed the day-of by the load serving entity. ²⁰

Chapter 3: Accounting for strategic reliability reserve resources

In 2022, Assembly Bill (AB) 205 was signed into California law and created a strategic reliability reserve (SRR) to support grid reliability during extreme events. A subset of the SRR is the Electricity Supply Strategic Reliability Reserve Program (ESSRRP) managed by the Department of Water Resources (DWR), which is comprised of generation assets required to maintain reliability during extreme events. As shown below, the ESSRRP includes 2,886.8 MW of long-start resources in Table 1 and 263.5 MW of short-start resources in Table 2. The dispatch of the ESSRRP resources for the use in the CAISO BA is described in Operating Procedure 4420 and guides how each type will be considered in the RSE as described further below.

Table 1: Long Start ESSRRP Resources

Host BAA	Site	Capacity (MW)
CAISO	CSUCI	27.5
CAISO	AES - Alamitos	1,141.2
CAISO	AES – Huntington Beach	226.8
CAISO	GenON	1,491.3

²⁰ CAISO Tariff section 31.5.3.1.2 Demand Response Adjustments

Table 2: Short Start ESSRRP

Host BAA	Site	Capacity
		(MW)
CAISO	Calpine Greenleaf 1	60.0
BANC	Roseville Energy Park	60.0
CAISO	ERock – City of Lodi	48.0
BANC	ERock – Modesto Irrigation District	48.0
TID	ERock – Turlock Irrigation District	47.5

Long Start Strategic Reserves

All long-start SRR resources are located within the CAISO BA. These long-start resources may be committed multiple days in advance of a forecasted extreme event warranting grid support to accommodate unit start-up times and to allow for unit testing in advance of an extreme event. Whenever these resources are committed to minimum load and the CAISO BA has specified the extreme event period, the SCs for these resources are expected to submit day-ahead offers for all available capacity during the specified event hours. To the extent that bids have been submitted, long-start SRR resources will be accounted for as available supply in the RSE.

While the long start ESSRRP resources are physically located within the CAISO BA footprint, the SRR is meant to support grid reliability across California. To ensure that these resources are accessible by other participating EDAM BAAs in California, the CAISO will consider the ability for these resources to be accounted for by multiple EDAM BAAs located within California.

Short-Start Strategic Reserves

The short-start SRR resources will not be committed before the day-ahead market and will not submit day-ahead offers, but instead may offer into the real-time market when the CAISO BA or other California BAs declare an EEA Watch or more severe EEA conditions. For this reason, short-start SRR resources will not be eligible for the RSE. For purposes of the WEIM RSE the EDAM footprint will be tested as whole, allowing the sharing of short-start SRR. By the EDAM design, a BA can be excluded from pooled

approach in the WEIM.²¹ The CAISO proposes to monitor both the extent to which this occurs as well as the potential for short start SRR to be inequitably stranded.

Chapter 4: Curing expected upward RSE shortfalls

As explained in the chapters above, the CAISO BA will examine its RSE position each morning using the 9 a.m. advisory RSE results. If the CAISO BA expects an upward RSE shortfall based on these results, it will need to cure the anticipated shortfall in advance of the binding 10 a.m. RSE. Upon EDAM go-live, the CAISO BA plans to use its existing Exceptional Dispatch authority to address any underlying reliability issues identified by the EDAM RSE. The CAISO BA does not plan to cure expected downward RSE shortfalls.

The basis for the CAISO's proposal to utilize its existing Exceptional Dispatch authority is the forecast emergency conditions. ²² The RSE is testing the CAISO BA's expected day-ahead obligations against its available, forward contracted supply. To the extent an EDAM RSE shortfall is forecast, the CAISO does not have a reliable next-day operating plan. The RSE in this context is serving as an additional reliability tool available to CAISO system operators as they exercise their existing discretionary authority to resolve potential reliability problems. The exercise of this Exceptional Dispatch authority will consider the economics and efficiency of the available supply to the extent possible, consistent with existing Exceptional Dispatch practices. While economy energy intertie supply offers may become available, there is no guarantee as to their availability and/or volume and they would not prevent the CAISO from taking additional actions to maintain reliability, consistent with good utility practice.

Chapter 5: Incentives for tagging day-ahead imports

As established in the EDAM design, EDAM BAAs that pass the day-ahead RSE will be grouped together and evaluated as a pool for the WEIM RSE.²³ This is an important aspect of EDAM design, as it retains the diversity benefits for the BAAs that pass the day-ahead RSE. Grouped BAAs benefit significantly because their uncertainty requirements incorporate the diversity benefit. The diversity benefit reduces

²¹ EDAM Final Proposal §II.B.2h

²² Per CAISO Tariff section 43A.4.2.1 and section 43A.2.5, an Exceptional Dispatch may also result in a Capacity Procurement Mechanism (CPM) designation and payment.

²³ EDAM final proposal, section II.B.2(h), page 76.

the overall reserve requirements, as the collective uncertainty is lower than the sum of individual uncertainties, enabling the grouped BAAs to procure fewer reserves.

EDAM BAAs that pass the day-ahead RSE must comply with tagging requirements to remain in the pool. ²⁴ As established by EDAM design, BAA scheduling coordinators will have until approximately 5 hours before the start of the operating hour to submit e-tags and/or replace the un-tagged capacity with other firm schedules or physical resources. BAAs that fail to comply with these tagging requirements will be removed from the pool, thereby losing potential diversity benefits. There may be legitimate instances when an import does not tag by the EDAM deadline. For this reason, the EDAM design allows BAA scheduling coordinators to replace the un-tagged capacity with other firm schedules or physical resources. This ability to re-supply is consistent with current industry and utility practice. ²⁵ Overall, the intent of the tagging requirement is to ensure the integrity of day-ahead RSE supply, especially when such supply includes non-resource specific intertie transactions.

In track A1 of the <u>EDAM ISO BAA participation rules</u> initiative, the CAISO Department of Market Monitoring (DMM) submitted comments recommending that the CAISO develop incentives to ensure day-ahead imports into the CAISO BA are tagged by the EDAM deadline (5 hours before the start of the operating hour). ²⁶ As explained by the DMM, such incentives would help ensure that the CAISO BA remains within the pool and does not lose potential diversity benefits. As suggested by the DMM, one approach to developing such incentives would be to quantify the cost to the CAISO BA of being removed from the EDAM pool (i.e., the lost diversity benefits). The CAISO BA could then consider allocating such costs to scheduling coordinators that fail to tag by the EDAM deadline.

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The creation of day-ahead e-tags is a standard practice across the western interconnection, ²⁷ and is commonly performed by market participants within the CAISO BA. Empirical analysis has also shown the

²⁴ See proposed EDAM Tariff Section 33.31.1.6 (requiring compliance with the tagging protocolss et forth in Section 33.30.8.3 and the Business Practice Manuals).

²⁵ For example, a load serving entity relying on import supply, if not tagged by a certain timeframe, will take steps to procure additionals upply in advance of the operating hour to ensure it can serve its load.

²⁶ California ISO Department of Market Monitoring <u>comments</u> on the *Extended Day Ahead Market ISO Balancing Authority Area Participation Rules* initiative, August 14th, 2023.

²⁷ See WECC Criterion INT-003-WECC-CRT-3.2

high reliability of economy energy imports that receive day-ahead market schedules from the CAISO. ²⁸ The CAISO proposes to wait to determine whether or not additional incentives are needed to ensure that day-ahead imports into the CAISO BA are tagged within the timeframe required by the EDAM design. Further, stakeholder comments on the *Issue Paper* did not identify this as a policy priority for the CAISO prior to the implementation of EDAM. Any robust, cost causation-based incentive mechanism will require significant stakeholdering; the CAISO believes it prudent to devote limited policy development and implementation bandwidth to demonstrated market design shortcomings and/or stakeholder priorites.

Next steps

The CAISO will host a virtual stakeholder meeting on May 13, 2024 from 9:00 am to 12:00 pm to discuss the key elements of this straw proposal. Please submit written comments on the straw proposal and stakeholder meeting by end of day May 27, 2024.

²⁸ See Figure B.37 on page 123 of the <u>Root Cause Analysis: Mid-August 2020 Extreme Heat Wave</u>