Attachment A - CISO BAA Supplement to the EDAM Business Practice Manual

Reference Section 33 and Section 27.14 of the ISO Tariff

Consistent with Section 27 of the ISO Tariff, the ISO Balancing Authority Area ("CISO BAA") will participate as a balancing authority in the EDAM Area. The implementation details specific to the CISO BAA's participation in EDAM are set forth below. These CISO BAA-specific elements include how to set the EDAM net export transfer constraint and options for curing CISO BAA EDAM advisory RSE shortfalls.

A. Establishing the EDAM Net Export Transfer Constraint for the CISO BAA

Reference ISO Tariff, Section 27.14.3

As provided in section 33.31.3 of the ISO Tariff and section 3.1.6 of the Business Practice Manual for the Extended Day Ahead Market, each Balancing Authority Area in the EDAM Area, including the CISO BAA, may configure the constraint to establish the Balancing Authority Area's hourly limit on the amount of Net EDAM Transfer exports. The CISO may enable the configurable EDAM net export transfer constraint as set forth below, utilizing the confidence factor provided for in ISO Tariff Section 27.14.3.1 and the additional reliability margin provided for in ISO Tariff Section 27.14.3.2.

For the CISO BAA, until otherwise provided, will always elect to enable the EDAM net export transfer constraint utilizing a tunable confidence factor and additional reliability margin, configured by hour, as described in this Business Practice Manual. The CISO BAA will use a structure where each hour will be classified as "stressed" or "non-stressed," and the configurable parameters established accordingly. This will result in a variable approach where the constraint will always be enabled and the confidence factor and additional reliability margin vary across a 24-hour twenty-four hour period.

CONFIDENCE FACTOR: the CISO BAA will select a 0% confidence factor during all stressed and non-stressed hours.

ADDITIONAL RELIABILITY MARGIN: the CISO BAA will tune the additional reliability margin based on a determination of stressed and non-stressed hours.

> For all stressed hours, the CISO BAA will utilize hourly default values calculated by taking, at a minimum, the max of (1) replacement reserves based on forecasted most severe single contingency and (2) protection for a non-credible contingency (*e.g.,* extreme weather, fires, gas operational flow order).
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> For all non-stressed hours, the CISO BAA will utilize hourly values established through operator experience based on system conditions.

STRESSED HOUR DETERMINATION: The CISO BAA will utilize the following criteria to distinguish between stressed and non-stressed hours, with such designations reported via OASIS:

Stressed Hour: Includes any hour that meets one of the following conditions:

- Is a net-load peak hour (including hour-ending 17 through hour-ending 21), any day throughout the calendar year; or
- Is an hour in which **operational RA capacity + RA credits < demand forecast + contingency reserve requirement + regulation reserve + imbalance reserve upward requirement**; or
- Is an hour in which **operational net RA capacity + RA credits < net demand forecast + contingency reserve requirement + regulation reserve + imbalance reserve upward requirement**; or
- Is an hour in which the **advisory RSE upward failure quantity – expected day-ahead offers not yet submitted by available RA resources with day-ahead must offer obligations > 0**; or
- Is an hour in which Restricted Maintenance Operations are in effect; or
- Is an hour in which there is a wide-area Transmission Emergency; or
- Is an hour in which the D+2 RUC shows an infeasibility; or
- Is an hour in which an EEA Watch is in effect, if called before the submission deadline; or
- Is an hour in which a Flex Alert is in effect, if called before the submission deadline; or
- Is an hour in which CAISO BAA system operations, based on system conditions and operator experience, has indicated is a stressed hour.
- Is designated for an hour by CAISO BA operations, based on system conditions and operator experience.

Non-Stressed Hour: Includes any hour that does not meet the criteria above.

B. Securing Day Ahead Sufficiency Within the CISO BAA

Reference Section 33.31

The EDAM resource sufficiency evaluation (RSE) is designed to incentivize BAAs participating in EDAM, like the CISO BAA, to offer sufficient supply to meet their next-day obligations prior to engaging in transfers with other EDAM participating BAAs. As an EDAM participating BAA, the CISO BAA must be prepared to meet its Day Ahead RSE obligations at or before 10 a.m. each morning. As part of this process, the CISO BAA will evaluate its RSE position and take actions to ensure reliability if there is a significant projected supply shortfall. The RSE is applied equally and uniformly across the EDAM BAAs. The processes and actions discussed below are equally applicable and available to any EDAM BAA that chooses to use them.

Ensuring the advisory RSE results provide a realistic assessment of expected CAISO BA supply and demand obligations to support reliable operation:

The CISO BAA requests all Scheduling Coordinators to submit bids and offers into the markets as early as possible to support the advisory RSE results and CISO BAA action efforts described below. Failure to submit timely bids and offers before 9 a.m. may cause advisory RSE results for the CISO BAA to fail to reflect significant volumes associated with day-ahead supply offers that are expected and required by 10 a.m. To the extent market participants can voluntarily submit day-ahead offers by 9 a.m., this will increase the accuracy of the advisory RSE runs. Submission prior to 9 a.m. would not prevent scheduling coordinators from further updating their offers until the day-ahead market closes at 10 a.m.

Based on operator judgement and experience, and good utility practice, each day the CISO BAA will evaluate the advisory RSE results to determine if the CISO BAA is at risk of failing the EDAM RSE and, where appropriate, will take actions as described below.

Accounting for reliability demand response resources:

A. Consistent with Tariff section 33.31.4.1, load modification and demand response resources that do not qualify as EDAM Resource Facilities may be accounted for within the RSE. If the CISO BAA accounts for load modification and demand response resources through this mechanism, the CISO BAA may adjust RUC participation to correspond to such adjustment. Any other EDAM BAA with reliability demand response resources (RDRR) may also utilize the process described below.

Where the CISO BAA advisory RSE results indicate the CISO BAA is anticipating or otherwise indicated to have an upward RSE shortfall in one or more intervals, then the CISO BAA may account for out-of-market load modification and demand response programs, to the extent applicable, and will submit a load modification and demand response modification to account for RDRR resources as an adjustment to the RSE. Importantly, the adjustment will be limited to the available RDRR capacity that did not submit a day-ahead offer by 9 a.m.[1] The CISO BAA adjustment is not made unless the CISO BAA reasonably expects the RDRR resources will be enabled or deployed.[2] An MNS message will be sent if the CISO BAA accounts for RDRR as provided below.

<u>Process of Adding RDRR to RSE:</u>

[1] Any available RDRR capacity in the CISO BAA that is offered into the day-ahead market by 9 a.m. would already be reflected as RSE-eligible supply.

[2] The RDRR trigger is determined by real-time reliability conditions (e.g., EEA Watch). Forecast conditions, including but not limited to resource availability, load changes, changes in renewable generation or intertie supply offers, or any other operating condition may prevent real-time EEA Watch conditions and therefore the need to dispatch RDRR resources.

CISO BAA Participant Actions:

1. After 09:00 DA RSE, CISO BAA operator determines whether conditions for including RDRR in the RSE have been met
2. CISO BAA operator determines amount of available RDRR to include in the RSE and in which hours.

Market Operator Actions:

1. Market operator receives RDRR values and sends MNS communicating which EDAM BAAs intend to include RDRR/equivalent resources in the DA RSE that day.
2. Before the 10:00 binding DA RSE run, the market operator sums hours and amounts of RDRR/equivalent resource capacity and subtracts the sum from load forecast for CISO BAA (or applicable EDAM BAA, where relevant) in each hour
3. Market operator executes Ancillary Service Requirement Setter for CISO BAA and then executes the market runs (e.g. MPM/IFM)
4. Before RUC, the market operator may create a RUC Net Short amount for CISO BAA to reflect adjustment level.[3]
5. Market operator publishes the summed RUC Net Short adjustment to CISO BAA OASIS site with RDRR identified in the reason(s) on days it is incorporated

Accounting for strategic reliability reserve resources:

In 2022, Assembly Bill (AB) 205 was signed into California law and created a strategic reliability reserve to support grid reliability during extreme events. Within the CISO BAA, the Electricity Supply Strategic Reliability Reserve Program (ESSRRP) includes two types of resources: long-start and short-start. The dispatch of the ESSRRP resources for the use in the CISO BAA is described in Operating Procedure 4420.

Long-Start Strategic Reserve Resources in CISO BAA**:** will be accounted for when such resources are online and meet operational requirements.

Long-start ESSRRP resources may be committed by the ISO 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. Operating Procedure 4420 outlines that long-start SRR resources are not required

[3] RUC Net Short tool nets any other desired RUC adjustments including IR, LMDR, or adders

to bid into the day-ahead market when they are brought online. Rather than relying solely on day-ahead market bids, ISO market operators will monitor SRR activity and include long-start SRR resources in the RSE on days when they have been brought online and met operational requirements.

Short-Start Strategic Reserve Resources in CISO BAA: will not be accounted for in the day-ahead timeframe.

Short-start ESSRRP resources are not committed before the day-ahead market and will not submit day-ahead offers but instead may offer into the real-time market when the CISO BAA or other California BAs declare an EEA Watch or more severe EEA conditions.

Curing potential reliability concerns to the extent CAISO BA system operations determines they are correlated with upward RSE shortfalls

If by 9 a.m. the CISO BAA expects an upward RSE shortfall that reveals threats to system reliability, the CISO BAA may use its existing Exceptional Dispatch authority.

The CISO BAA will utilize its Exceptional Dispatch authority when it determines that the EDAM RSE shortfall is indicative of the CAISO BA potentially not having a reliable next-day operating plan, with the hour-by-hour results providing an additional reliability indicator available to BA system operators as they exercise their existing discretionary authority to resolve potential reliability problems. The CISO BAA is not altering its existing Exceptional Dispatch authority or practices but affirming use of that authority when reliability indicates and the CISO BAA expects an upward RSE failure at 10 a.m. Other EDAM BAAs may utilize a similar process of Manual Dispatch and adapting the steps below.

Process to Create a Day Ahead Exceptional Dispatch

Prior to 9:00 a.m.: the CISO BAA will determine if it may utilize its existing Exceptional Dispatch authority and procedures to respond by providing the Market Operator with the resource, MWs and timing requirements.[4]

Before the Day Ahead execution: the market operator will use the MOC tool to commit this resource as an Exceptional Dispatch with a single-resource MOC of matching MWs and time frame. The market operator will confirm completion of any instructions.

[4] EDAM BAAs must also create a matching forward-dated Manual Dispatch in the WEIM BAAOP system.