Extended day-ahead market resource sufficiency evaluation discussion

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Market Surveillance Committee Meeting
General Session
December 19, 2022

The EDAM RSE determines if each BAA has a day-ahead supply plan that would allow it to meet its obligations on a stand alone basis

- Stakeholders believe that an EDAM RSE is necessary to account for different RA programs and capacity constructs of participating BAA's
  - Increases the confidence in transfers cleared by the EDAM
  - The ISO operates within a capacity/energy market construct, rather then energy only

- Ensures sufficient liquidity to clear the market
  - Reduces market power concerns
  - Limits likelihood of having to set administrative prices

The EDAM RSE will be integrated into the ISO's day-ahead market process

- Run prior to the day-ahead market
- Utilizes the resource bids made available by each BAA
  - Uses ISO market optimization and all existing resources models
  - The IFM will utilize the same bid-set to clear the market

- Evaluates bid-in supply against demand forecast and uncertainty requirements for next day (24h) horizon
  - Demand forecast can be provided by ISO or an EDAM BAA; will utilize the most accurate forecast
  - Uncertainty requirements will be calculated by the market operator
  - AS will be self provisioned

The EDAM RSE will be an on-demand application

- The ability to iteratively run increases an EDAM BAA's ability to pass the test

- While the application is on-demand, it has pre-set advisory runs that start at 6:00 and 9:00 AM
  - All requirements will be fixed at 9:00 AM to provide a stable target for the final binding run

- Utilizes the SCUC optimization assuming all load and supply is modeled on a single bus
  - Will not consider transmission constraints

Propose to account for all different supply types used by EDAM BAAs in a manner that instills confidence

- As a default for supply to count, resource bids will be required
  - All supply must be under forward contract
- Non-source specific supply, such as WSPP-C, can count with specific tagging rules
- Emergency or non-market demand response can serve as a load modifier; will monitor day-ahead commitments and real-time DR deployment
- VER forecast will be used in EDAM RSE and RUC
  - BAA level load self-scheduling rules in the IFM

Non-resource specific supply contracts (WSPP-C) to identify a source BAA

- If the source BAA is within the EDAM footprint the sink BAA and/or 3rd party merchant will work with the source BAA to model as a bucket 1 transfer
  - Results in more accurate price formation by utilizing resources internal to the footprint
  - If agreement to model as a transfer can't be reached, the ability to model as a self-scheduled injection at BAA boundary remains

- If the source BAA is external to the EDAM footprint, supply will be modeled as a self-scheduled MW injection sourced at the sink BAA's boundary

The surcharge for failure of the EDAM RSE is intended to be a proxy for the cost of procuring a block of energy from the bilateral market

- The objective is to ensure that the EDAM provides an comparable option to address next day capacity needs as the existing bilateral markets
  - Design is in response for stakeholder desire to provide transition from purely bilateral day-ahead construct into a regional day-ahead market
  - An “in-market” hourly penalty is difficult to right-size to a bilateral block purchase; exacerbated by potential marginal pricing application to all day-ahead awards

- Repeated failures will have a prospective 1% adder applied to the Tier 2 or 3 multiplier for each day over a rolling period
  - Intended to discourage and account for systemic failure
  - % adder configurable and open to revision following monitoring of potential abuse

Based on stakeholder feedback the proposal is a 3 tiered structure for the surcharge

Tier 1 – De minimums failure within max of 10 MW or the forecast error of the BAA's IRU requirement

No Consequence

- Designed to ensure failure within a small margin does not result in asymmetric financial penalties

Tier 2 – A RSE failure less than 50% of BAAs IRU requirement

Consequence is surcharge x1.25 with ratcheting consequences for repeated failure

- While a BAA is not resource sufficient it can meet its P50 forecast plus a reasonable amount of uncertainty

Tier 3 – A RSE failure less than 50% of BAAs IRU requirement

Consequence is surcharge x2 with ratcheting consequences for repeated failure

- This represents a significant shortcoming in a BAA's ability to meet its day-ahead supply plan. During tight system conditions can impact the EDAM footprints ability to achieve a feasible solution or impact market results

The EDAM and WEIM RSE designs need to be coordinated to ensure the correct incentives

- The proposal attempts to cure deficiencies through the EDAM
  - Does not allow a BAA to intentionally avoid forward/day-ahead procurement in day-ahead blocks to cure at hourly, potentially real-time imbalance only, consequence in the WEIM
  - Allocation of the EDAM deficiency surcharge will be at the discretion of each EDAM BAA; 2 tiered allocation for the CAISO BAA
  - Transfer obligation trading platform available to facilitate curing between EDAM BAAs; incentives curing through 100% revenue allocation
- WEIM assistance energy transfers will be available as a tool to cure real-time insufficiency

Proposing all EDAM BAAs that pass the EDAM RSE are tested in the WEIM RSE together as a pool

- Ensures diversity benefit realized in the day-ahead market is present in real-time
- Participation in the pooled WEIM RSE creates incentives for EDAM BAA's to participate with, and submit e-tags on physical supply
- Fixed IFM schedules and an existing constraint that does not allow a WEIM BAA to dynamically export itself into a shortage will ensure the shortfall appears as a PBC relaxation in the correct BAA within the pool
- Insufficient day-ahead bids to clear the EDAM market, or a failure to submit e-tags can result in an EDAM BAA being excluded from the WEIM pool

The EDAM will provide a net EDAM transfer constraint

- Allows a BAA with must-offer supply rules to control how their supply is used in the EDAM
  - Available to all participating EDAM BAA's; methodology for how constraint is used is at discretion by each BAA

- Limit would constrain supply in excess of RSE requirements. Would base constraint limit to ensure objective concerns, such as replacement reserves or traditional non-credible contingences (fires), do not jeopardize reliability