



California ISO

Extended Day Ahead Market
Working Group 1 Weekly Report

Supply Commitment and Resource Sufficiency
Week 8 Report
2/21/22 – 2/25/22

Progress Tracker

Topic	Schedule
Core Design Decision	
Resources qualifying	Discussed 1/12,19,21,24,26, 2/14,16,23; in progress
Expected granularity and detail	Discussed 1/10,12,19,21,31, 2/7,14,16,23; in progress
Ancillary Services requirement	Discussed 1/12; in progress
Transfer Reliability	
Reliability and confidence in EDAM transfers	
RSE Advisory Showing	
Characteristics of 45 day ahead advisory showing	Discussed 1/5&10; on hold
RSE Timing	
Timing of conducting the EDAM RSE	Discussed 1/10,12, 2/16,23,25; in progress
EDAM RSE Components	
Capacity Test	Reviewed concepts 1/12
Ramp Capability Test	Reviewed concepts 1/12
Test Constraints	Discussed 2/7, 14, 25
Inputs	Discussed 2/7, 14, 25
EDAM RSE	
Resource Qualification Rules	Discussed 1/12,19,21,24,26,31, 2/7,14,16; in progress
Failure Consequences	Discussed 2/16, 23; in progress
EDAM to EIM RSE	
Interaction with Western RA Programs and Reserve Sharing Groups	
Reserve Sharing	
RA Programs	

Weekly Discussion

February 23

Scope Items Discussed: Resource Sufficiency Evaluation – Failure Consequences

Presenters: Phil Pettingill and Danny Johnson

Discussion

The objective of this first meeting of the week, held on Wednesday due to the Monday Presidents' Holiday, was to continue the failure consequences dialog from the February 16th meeting in which the notion of limiting participation of transfers received little to no support and ideas of financial penalties/incentives seemed to garner broad support. The plan for the second meeting on Friday, February 25th was stated to hold an EDAM training/review session in the morning 9-11am. The questions to explore with regard to a financial penalties approach were stated as: hourly/daily assessment, potential use of high risk periods such as seasons or critical hours, and potential for progressive penalties related to frequency or severity of failures. A concern for the potential of leaning and potential price impact was discussed relative to an incentive/penalty approach. Then a hurdle rate proposal was presented and discussed. This approach would limit transfers during failed hours and relax the limitation to allow transfer at predefined hurdle to ensure supply within deficient BAA is utilized depending on selected rate and compensate supporting entities. There was a comment that there be a confirmation in the market of a feasible solution with the hurdle rate approach and questions relative to the timing and applicability relative to EDAM and EIM along with requests for more details on pricing and compensation. There was also a concern expressed regarding the market sensitivity to a hurdle rate and a comment the market feasibility requirement may address this. An IFM re-run proposal was presented to run IFM with no transfer limitation, then rerun with only bucket 1 transfers and charge deficient BAAs the re-dispatch costs. After questions and comments primarily for clarification of the proposal, the CAISO presented options to cure day-ahead insufficiency through a hosted energy and imbalance trading platform, and this resulted in further questions/comments for clarity and relationship to other elements of the EDAM design. The meeting concluded after presentation of the concepts of options for day-ahead procurement decisions and additional mechanisms needed to ensure high reliability.

Conclusion:

The work group focused discussion to several financially based proposals for defining the failure consequences portion of the Resource Sufficiency Evaluation including: questions to consider, a hurdle rate concept, an IFM re-run proposal, options to cure day-ahead insufficiency, options for day-ahead procurement decisions and mechanisms needed to ensure high reliability. There were many comments and questions suggesting more clarification and details including some related to distinctly separate elements of the EDAM. The review sessions planned for Friday and next Monday on Residual Unit Commitment and Convergence Bidding may answer some of these questions.

February 25

Scope Items Discussed: High Level EDAM Design – Residual Unit Commitment and Convergence Bidding
Presenters: James Friedrich

Discussion

This meeting, held on Friday morning, replaced the Monday, February 21 meeting because the offices were closed for Presidents Day. The objective was to present a briefing on Residual Unit Commitment (RUC) and Convergence Bidding (CB) processes to provide an understanding of these current market designs for consideration for potential application to the Extended Day Ahead Market (EDAM). The presentation began with the review of the RUC process which is an element of the day ahead market that follows the market power mitigation and integrated forward market (IFM) components. The purpose of RUC is to ensure sufficient capacity is committed to meet the differences between cleared physical supply/demand and forecast demand which is driven by the following: bid-in and forecast load, variable energy resource (VER) schedules and forecast output, and the net virtual supply or net virtual demand. Comments and responses clarified that the RUC award is for capacity rather than energy and they do carry an obligation to bid in the real time market in which bids are inserted if not submitted by the resource. In addition, there are no pay provisions for unavailable RUC capacity. The proposal for EDAM consideration is to include RUC with day ahead market enhancements (DAME) where reliability capacity up/down procurement will be used to meet imbalance uncertainty. A question regarding the need for RUC in spite of RSE was answered with statement that RUC is a market mechanism to ensure sufficient capacity is made available to meet the differences previously discussed. Further, RUC only procures capacity to potentially provide energy based on day ahead requirements and is not dependent on the demand cleared in IFM. Regarding any requirement to bid into RUC, bidding is voluntary with respect to the RSE because it is based upon the submitted energy bids as currently proposed. The RUC optimization uses the same security constrained unit commitment process used by IFM but uses demand forecast instead of demand bids and IFM schedules are fixed in RUC. The presentation also covered availability bid, capacity available, payments and cost allocation, and the optimization horizon. Questions and comments were received on the topics of price formation implications of RUC, timing relative to curing deficiencies, whether or not there are incentives to bid into RUC, and details regarding application to EDAM, and these may be addressed with continued discussion planned for Monday, February 28, 2022. The presentation ended with a high level overview of the convergence bidding and this presentation will continue on Monday as well.

Conclusion:

The discussion focused primarily on the review of the Residual Unit Commitment (RUC) process along with clarifying questions and answers and a very brief overview of the Convergence Bidding (CB) process. Discussion will continue on Monday, February 28, 2022 to complete the overview of Convergence Bidding and the review the EDAM design review and discuss how RUC and CB may apply to the EDAM RSE.