

Extended Day-Ahead Market Working Group 1: Supply Commitment and Resource Sufficiency Evaluation

Resource Sufficiency Evaluation details

Facilitator: Mark Richardson

Scribe: Bob Kott

January 12, 2022

Meeting Cadence: Mondays and Wednesdays, 1 - 3 p.m.

Agenda:

Time:	Topic:	Presenter:
1:00 – 1:05	Welcome/introductions	Kristina Osborne
1:05 – 1:10	Quick review of last meeting	Mark Richardson
1:10 – 2:50	Discussion on relevant RSE scope topics	Mark Richardson
2:50 – 2:55	Recap of discussion	Bob Kott
2:55 – 3:00	Upcoming topics	Mark Richardson



Reminders:

- These collaborative working groups are intended to foster open dialogue and sharing of ideas and perspectives
- Please raise your hand if you have a question or comment at any time during the meeting and the facilitator will call on you
 - Please start by stating your name and affiliation
- Meetings are recorded and video files posted on corresponding working group webpages
- Stakeholders are welcome to present perspectives at these meetings
 - Please submit a request to present using the link located on the EDAM Resources slide at the end of this presentation



Today's Objectives

- Quick review of Mondays meeting
- ISO to propose potential option for Capacity and Flexibility Test
- Discuss relevant RSE Scope topics
 - Define what informs the EDAM RSE's requirements
 - What are the types and characteristics of resources that will qualify for showing resource sufficiency



Discussion – Resource Sufficiency Scope topics

- Forecast requirement to test against
 - Who provides?
 - Should the requirement include reserves?
 - Should the requirement include uncertainty?



Discussion – Resource Sufficiency Scope topics

- Qualification and counting of resources that are modeled and within EDAM BAA
 - Ex; Conventional resources, Hydro, Energy Storage,
 Variable Energy Resources, Multi-Stage Generator
 - 3rd party non-contracted supply
 - Demand Response



Conventional Resource Qualification & Counting

- Gas Resource G
 - 100 mw pmax
 - 1 daily start
- Given the above resource can only operate at pmax for the full day, what makes sense from a counting standpoint to credit this resource towards the RSE?
 - Does the single daily start characteristic limit how this resource is counted?



Hydro Qualification & Counting

- Hydro Resource W
 - 25 mw pmax
 - 200 mw/h daily energy limit
- Given the above resource can only operate at pmax for a total of 8 hours, what makes sense from a counting standpoint to credit this resource towards the RSE?
 - 25 MW for all hours?
 - Require the scheduling coordinator to respect the daily energy limit through bids?



Energy Storage Qualification & Counting

- Battery Resource B
 - 50 mw pmax
 - 200 mw/h Max Storage Capability (4 hour battery)
- Given the above resource can only operate at pmax for a total of 4 hours, what makes sense from a counting standpoint to credit this resource towards the RSE?
 - 50MW for all hours?
 - Should a EDAM entities requirements be increased to reflect expected charging?



Variable Energy Resources – Solar & Wind Qualification & Counting

- Solar Resource S
 - 100 mw pmax
 - DA Forecast shows resource is; ramping up HE6 10, full capacity HE11 – 16, ramping down HE17 – 19
- Wind Resource W
 - 50 mw pmax
 - DA Forecast shows resource is; ramping up HE3 4, full capacity 50mw HE4 – 6, variable outputs HE16 – 18
- Does the full forecast qualify to be counted towards RSE?
- What if only a fraction of the forecast is actually bid in?



MSG Resource Qualification & Counting

- Gas Resource M
 - 3 configurations
 - Config 1 = 10 100mw
 - Config 2 = 105 200mw
 - Config 3 = 175 300mw
 - Transition time 30minutes
 - Forbidden regions
 - Overlapping configurations
- Given the above resource has a forbidden region, overlapping configurations, and transition times, what makes sense from a counting standpoint to credit this resource towards the RSE?



Additional Considerations

- Demand Response programs
 - Many entities have demand response programs that do not qualify to be modeled as a resource under existing rules; how should this supply be accounted for
- Uncontracted 3rd party supply
 - Initial thoughts are that no entity should be able to count this supply as part of their supply. To the extent there is support for this position, is enforcement/validation necessary



Check In

- Quick review of Mondays meeting
- Discuss relevant RSE Scope topics
 - Define Requirement and Qualifying Resources
- Next Steps



Questions?



EDAM Resources

- List of <u>Common EDAM design principles and concepts</u>
- Initiative and working webpages:
 - EDAM initiative webpage:
 https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market
 - Working Group 1 webpage:
 https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-Day-Ahead-Market-Working-Group-1-Supply-Commitment-Resource-Sufficiency-Evaluation
 - The working group webpages include meeting materials, initial scope items, and weekly summary reports
- Please submit EDAM WG inquiries and/or requests to present at https://www.surveymonkey.com/r/EDAMWG-Inquiries
 - Presentations due 5 business days prior to the meeting where they are scheduled to present, if time allows
- Register for working groups to help the ISO gauge interest and facilitate communication throughout process.
- Nov 30, 2021 Day-Ahead Market Overview Training: https://youtu.be/lbXRsfdVbCg

