California ISO

Stakeholder Comments Template

RA Enhancements

This template has been created for submission of stakeholder comments on the straw proposal part two that was published on February 28. The paper, Stakeholder meeting presentation, and other information related to this initiative may be found on the initiative webpage at:
http://www.caiso.com/informed/Pages/StakeholderProcesses/ResourceAdequacyEnhancements.aspx

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on March 20.

Submitted by	Organization	Date Submitted
Joe Greco	*Middle River Power*	*March 20, 2019*

Please provide your organization's comments on the following issues and questions.

1. Review of counting rules in other ISO/RTO's

Please provide your organization's feedback on this topic, described in Section 4.1. Please explain your rationale and include examples if applicable.

Middle River Power ("MRP") appreciates the California ISO ("CAISO") providing background and context for their proposal by describing how other ISOs and RTOs use a UCAP methodology in their resource adequacy programs. MRP supports the CAISO exploring whether similar concepts could be applied within California.

2. Capacity counting and availability best practices

Please provide your organization's feedback on this topic, described in section 4.2. Please explain your rationale and include examples if applicable.

MRP supports removing the performance incentives from the RAAIM calculation. Performance incentives layered on top of forced outage penalties seem unnecessary as non-performance is already de facto penalized by the real-time price. It is MRP's understanding that for internal resources having to buy back energy at the higher real-time price has been sufficiently incenting performance and routine maintenance.

Additionally, it also appears that the current counting rules and RA Availability Incentive Mechanism ("RAAIM") are sufficiently incenting the majority of resources to perform needed

maintenance and offer into the day-ahead and real-time markets according to the generic and flexible RA rules. As described later in the comments, MRP is most concerned with whether the current system and flexible RA requirements are sufficient to ensure reliability. Going forward there is a growing acknowledgement that system reliability will be stressed due to:

(1) the increase in variable energy resources behind-the-meter and as resource adequacy capacity,

(2) the challenges of predicting supply availability due to weather impacts, particularly hydroelectric generation and supply-side imported variable energy resources, and

(3) the shrinking excess of capacity within California and across the West as coal and gas retirements take place.

MRP agrees these all impact reliability and make RA planning more challenging. Specifically, we believe the calculation for the Resource Adequacy Requirement should be modified since the behind-the-meter solar reduces the Net Load portion of the calculation. Based on the variability mentioned the BTM should be included in the Net-Load calculation and treated as a supply side resource with appropriate ELCCs. Ultimately the CAISO has primary responsibility to manage the grid. While ideally the RA program would be updated in lockstep coordination with the California Public Utilities Commission (CPUC) so that both programs change RA requirements, MRP acknowledges the reality that frequently one agency will have to move first. In this case, given the CAISO's ultimate responsibility for the grid, MRP supports the CAISO exploring an approach to layer a UCAP methodology onto the existing program.

3. RA counting rules and assessment enhancements

Please provide your organization's

Please indicate any analysis and data review that your organization believes would be helpful to review on the this topic. Please provide details and explain your rationale for the type of data and analysis that you suggest.

a. Calculating NQC, UCAP, and EFC values topic, described in section 4.3.1.

MRP strongly supports maintaining the current NQC for must-offer obligations. As the CAISO notes in the paper, the premise of including forced outages within the UCAP model is that it assumes resources will be on outage some of the time. Therefore, LSEs will still need to contract with resources up to the full NQC and a resource will still need to show the full NQC on the RA plan. Given that the CAISO is not changing the local RA requirement, it is also reasonable for the CAISO to solely use NQC within a local area.

The CAISO currently is proposing to use a 16-hour window for calculating forced outage rates for generic and flexible capacity. MRP believes this is inconsistent with how the other ISOs and RTOs calculate the UCAP. System planning is done to ensure peak-load requirements and therefore the CAISO should ensure it is covering the potential for forced outages during peak-periods.

In order to ensure reliability for both system and flexible needs, the CAISO should calculate a specific UCAP for each product. Specifically, a system UCAP requirement should use forced outage rates over a peak-period, whereas a flexible UCAP requirement should use forced outage

rates of flexible needs period. Ultimately, while it may add some complication, MRP supports a flexible assessment that is tied to resource's characteristics rather than EFC = UCAP * percent of available capacity economically bid into the CAISO's market. The CAISO has continually noted the need for fast-start, fast-ramping resources and the proposal does not seem to acknowledge their additional benefit to the grid. MRP understands the difficulties in proposing such robust changes on top of a new FRAC MOO II proposal and would support a phased approach.

b. Determining System, Local, and Flexible RA requirements topic, described in section 4.3.2. Please explain your rationale and include examples if applicable.

System reliability should be assessed on a defined LOLE level, rather than the current flat Planning Reserve Margin approach. (This topic may be taken up by the CPUC in their Track 3 RA Proceeding.) MRP supports RA Enhancements establishing a robust UCAP requirement based on realistic grid assumptions.

As noted in the previous section, MRP supports a new flexible RA definition – both requirements and counting rules. It has been three years since the CAISO last presented on flexible RA needs in its FRAC MOO 2 proposal development[1] and there have been significant changes to the grid that may inform a new product design.

c. RA showings, supply plans, and assessments topic, described in section 4.3.3. Please explain your rationale and include examples if applicable.

MRP supports the CAISO proposal for individual LSE assessments using the UCAP requirement and counting rules. It is MRP's understanding that resources would continue to show their NQC capacity on the plan and the CAISO would calculate the equivalent UCAP. This seems like a key way to simplify the additional rules and will likely lead to lower errors and confusion than if resources were to show two values or just the UCAP value on the supply plan.

Additionally, maintaining the must-offer obligation at the NQC both makes sense from a reliability standpoint and contractually. It certainly will simplify existing contracts as it will be very clear that the LSE is contracting for the NQC amount and not the UCAP amount.

Although not specifically discussed in part 2, MRP reiterates its support for an improved planned outage process, but maintaining the last in, first out capacity replacement rule. As MRP understands it, the CAISO at T-25 runs an outage impact report using the 1 in 10 CEC forecast and by T-22 assigns any planned outage substation requirements to suppliers. Page 90 of the original RS proposal shows this timeline. Suppliers then have until T-8 to provide the needed substitution. In practice, MRP is finding that the amount of required planned outage substitution is changing every day until the end of planned outage.

This is impossible to plan for and extremely costly to purchase capacity at the last minute – if it is even available. Planned outages are necessary to maintain reliability and it is challenging to find substitution at T-22 and impossible when the amounts needed seem to change daily. MRP asks that the CAISO explore whether the current process is aligned with the tariff, BPM, and original proposal's intent and further evaluate how the planned outage process can work better for both

[1] http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx

the CAISO and suppliers. MRP believes this close evaluation is needed prior to moving forward with either Planned Outage Bookend and therefore MRP does not support either a planned outage market or a prohibition on showing RA that has a planned outage that month.

Finally, MRP currently supports the removal of RAAIM completely once the UCAP methodology is fully vetted and functional. It could be that this is the CAISO's intent and if so, MRP asks for additional clarification on the step-down/removal of RAAIM method being proposed.

d. Backstop capacity procurement topic, described in section 4.3.4. Please explain your rationale and include examples if applicable.

Requirements without enforcement are more like suggestions than actual requirements. The UCAP proposal adds significant complication to an already complicated RA program. Without a meaningful backstop requirement, MRP does not believe the additional complexity would lead to a meaningful increase in reliability. Therefore, MRP's support for the UCAP proposal is contingent upon the CAISO also implementing an LSE-specific UCAP backstop (in some manner) to prevent leaning or under-procurement of system capacity.

Additionally, MRP supports removing RAAIM from RMR and instead use the current tariff availability rules. This seems consistent with the CAISO's vision of RMR to maintain consistent rules whenever possible with RA rules.

4. Review of RA import capability provisions

Please provide your organization's feedback on the following sub-section topics, described in section 4.4.

Please indicate any analysis and data review that your organization believes would be helpful to review on the this topic. Please provide details and explain your rationale for the type of data and analysis that you suggest.

The CAISO's analysis of MIC demonstrates that there is overall excess import capability for resource adequacy capability. MRP is sympathetic to participants that have commented that they are unable to transact for import capacity due to challenges in procuring additional MIC. MRP notes that there is significant tightening in non-CAISO WECC resource capacity markets. As additional states adopt their own renewable standards, coal and gas will retire in favor of wind and solar.

A recent reliability assessment by the North American Electric Reliability Corporation references a report by the Western Electricity Coordinating Council that states "[s]ystem reserve margins are expected to become increasingly tight through 2026, driven by baseload coal and nuclear retirements as well as steady increases in power demand; as a result, Wood Mackenzie and E3 forecast natural gas demand for power generation across the Western Interconnection to increase by 30% by 2026."[2] The Wood Mackenzie report indicates that the western region will see approximately 9 GW of coal and 2 GW of nuclear plant retirements across the region by 2026.

[2] North American Electric Reliability Corporation, 2018 Long-Term Reliability Assessment, December 2018 at p. 26, fn.18

This tightening will naturally decrease both imports of RA and energy-only resources into the CAISO, potentially negating the need for a reexamination of MIC rules as additional MIC is freed up for bilateral trades as needed.

Additional comments

Please offer any other feedback your organization would like to provide on the RA Enhancements straw proposal – part two.

This initiative is covering a significant amount of ground and MRP thanks CAISO staff for all their hard work.

https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2018_12202018.pdf