



Stakeholder Comments Template

Resource Adequacy Enhancements

This template has been created for submission of stakeholder comments on the Resource Adequacy Enhancements working group on June 10, 2020. The stakeholder call presentation, and other information related to this initiative may be found on the initiative webpage at: <http://www.caiso.com/StakeholderProcesses/Resource-Adequacy-Enhancements>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **June 24, 2020**.

Submitted by	Organization	Date Submitted
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Please provide your organization's comments on the following issues and questions.

LSA and SEIA welcome the opportunity to provide feedback to the CAISO in this initiative. While the CAISO's proposal would exempt solar resources from many of its provisions, their interest is in the implications for storage resources, since increasing numbers of solar projects are incorporating storage capacity.

1. Production Simulation: Determining UCAP Needs and Portfolio Assessment

Please provide your organization's feedback on the Production simulation: Determining UCAP needs and portfolio assessment topic as described in slides 4-15. Please explain your rationale and include examples if applicable.

2. Transitioning to UCAP Paradigm

Please provide your organization's feedback on the transitioning to UCAP paradigm topic as described in slides 16-19. Please explain your rationale and include examples if applicable.

The CAISO's original proposed approach – "Option 1" – would retain the current NQC formulation and add adjust it for forced outages to derive the UCAP.

Certain other parties are proposing an "Option 2" that would adjust QC and NQC themselves instead of providing a new measure (UCAP). Thus: (1) the current NQC would become "Deliverable QC" (DQC); and (2) the CAISO-proposed UCAP would become the new NQC.

LSA and SEIA have the following comments on these proposals.

The transition to UCAP will create problems with existing non-VER contracts under either option, because such contracts (e.g., for energy storage) frequently: (1) Feature a capacity payment from Buyer to Seller per MW of NQC specifically; and (2) assign responsibility for any CAISO availability incentives or penalties (i.e., RAAIM) to the Seller. Generally, this is a case of (to quote Michel Florio) “where you stand depends on where you sit.”

Option 1 would leave Buyers – who assumed that the contracted-for assets would fully satisfy their RA obligations – paying for MWs of NQC even though the UCAP would likely be lower, i.e., paying for RA value they planned to receive but won’t, because UCAP is a new obligation not anticipated in their contracts. Sellers, however, would technically benefit from the elimination of RAAIM, which would lower their potential downside risk (though they would lose any upside potential). This is not a benefit Sellers expected to receive when the contract was negotiated.

The Buyer entities supporting Option 2 would benefit from that option, because they would effectively be able to reduce their payments to Sellers to reflect the lower UCAP (now called “NQC”) values below the original NQC formulation. This is a benefit they did not expect to receive when contracts were negotiated, since with RAAIM they still must pay the resource in full, and any non-availability penalties are imposed separately by the self-funding RAAIM structure.

However, Sellers would receive an unexpected contract payment reduction that could exceed any penalties under RAAIM given the exact same availability performance level, without even the ability to offer substitute capacity where feasible. Moreover, the proposed UCAP features are much more onerous than RAAIM (see below).

In either case, except for very limited circumstances (e.g. PIRP transitional mechanism many years ago), the CAISO should refrain from trying to manipulate logical proposals to satisfy controversial issues with contracts to which it is not a party. LSA and SEIA also agree that this option would create confusion by using the same terms to mean different things, and it would require “significant revisions to numerous” CAISO tariff provisions.

So, LSA and SEIA support Option 1. Buyer entities are free to argue that the change to UCAP would harm them by imposing an additional requirement above their contract terms, but any remedies for that problem should not impose an active disadvantage on Sellers.

Most contracts have sufficient availability incentives (e.g., minimum performance guarantees) that, combined with market consequences of non-performance, already incent high availability, so RAAIM has never really been needed for that purpose, in our opinion. The CAISO has never demonstrated that RAAIM or similar mechanisms are needed to incent high availability – resources on the CAISO system had high availability prior to RAAIM, and improvements since its implementation, if any, can be attributed at least in part to retirement of older, less-efficient resources and their replacement by newer, more-efficient resources.

3. Unforced Capacity Evaluations

Please provide your organization's feedback on the unforced capacity evaluations topic as described in slides 20-59. Please explain your rationale and include examples if applicable.

Treatment of new resources: LSA and SEIA support Option 2 – use of NQC – until resources have their own data. Option 1 – use of “class” average data – suffers from the lack of definition of the applicable “class” and fails to account for the likely higher reliability of new equipment.

Other issues: LSA and SEIA oppose several aspects of this part of the proposal, including:

- **The “supply cushion” concept:** Under this proposal, suppliers have no way to know in advance what the subject hours will be. The concept of focusing incentives and performance measures on a subset of hours is based significantly on the assumption that suppliers can exert extra efforts to manage the timing of forced outages, to the extent that they are able – e.g., make temporary changes to defer the potential for such outages beyond the current AAH window.

After-the-fact determination of “supply cushion” hours will undermine the concept of encouraging high availability in the highest-need hours, because suppliers will have no idea which hours will turn out to be important for system reliability. Yes, this will provide an incentive to “be there” in all hours, but then why use performance in only a subset of those hours to determine UCAP?

Moreover, the CAISO proposal seems to assume that its markets will be ineffective in incenting performance. Surely, suppliers and their off-takers constantly monitor market prices, and those prices will themselves incent availability in high-need hours.

The CAISO should know, much more than suppliers, which hours will tend to be “low-cushion” hours and be able to identify them in advance. Suppliers need clear standards, not after-the-fact penalties.

It may not be necessary to adopt fixed applicable hours far in advance, though of course suppliers would prefer that. Instead, the CAISO should consider approaches that would provide at least some advance notice – e.g., 24 hours – of hours likely to have low supply cushions (or other criteria CAISO adopts), so suppliers know far enough in advance to do their best to avoid forced outages in those periods.

- **Treatment of “Urgent” outages:** The CAISO proposal would reduce UCAP for both Forced Outages and “Urgent Outages” – where equipment “is known to be operable, yet carries an increased risk of a Forced outage occurring.” However, Urgent Outages are not actually outages – they are reported to the CAISO for its information, but the facility would still be performing (and contributing to system reliability) during this time.

It is thus unfair for this kind of “outage” to be counted for UCAP purposes; in fact, it would provide a perverse incentive to discourage suppliers from reporting them. The CAISO should only count actual Forced Outages against UCAP.

- **Complicated UCAP formulation:** The more complex the UCAP calculation, the more diluted the availability incentive. However, with clear signals from the CAISO about which hours are most critical for reliability, LSA and SEIA believe that most suppliers will do their best to maximize availability in those periods.
 - a. Please provide your organization’s feedback on the UCAP methodology: Seasonal availability factors topic as described in slides 27-46. Please explain your rationale and include examples if applicable.
 - b. Please provide your organization’s feedback on the UCAP methodologies for non-conventional generators topic as described in slides 47-59. Please explain your rationale and include examples if applicable.

Additional comments

Please offer any other feedback your organization would like to provide on the Resource Adequacy Enhancements working group discussion.

As contemplated, the UCAP proposal is significantly more risky for suppliers than the current RAAIM mechanism. LSA and SEIA urge the CAISO to make the following changes, to increase its effectiveness.

- **Set the applicable “cushion” hours in advance,** as discussed above. The CAISO can better estimate in advance which hours will be most crucial for reliability and should clearly communicate that information to suppliers.
- **Establish a “deadband” for UCAP adjustments to NQC.** One of the fairer and more equitable aspects of RAAIM is the deadband around the target availability factor, where a resource can be up to 2% “worse” than the target without incurring a penalty. The UCAP proposal, by contrast, would impose unavailability penalties from the first MW of forced outage. The CAISO should allow some reasonable leeway here (e.g, 2% forced outage rate) before making UCAP adjustments, especially since its reliability models already assume some level of forced outages. (The deadband concept has been applied to other CAISO market features, e.g., Uninstructed Deviation Penalties, for many of the same reasons.)
- **Provide an upside opportunity.** UCAP as currently proposed is purely a punitive measure, i.e., resources performing better than average are rewarded only to the extent that their UCAP would be below their NQC by a lesser amount than for other resources. The CAISO’s formulation should include the ability for a resource to be counted above NQC if its performance is superior compared to the fleet average and/or others in its class.

Finally, looking at the “big picture,” the CAISO has not yet clearly explained the relationship between the forced-outage reflection in UCAP and the current CPUC-set Planning Reserve Margin. It appears that there will be double-counting, since the PRM is intended, in part, to provide capacity to cover forced outages. This issue should be addressed more explicitly in the CAISO’s next proposal version.