



Capacity Procurement Mechanism Significant Event – Intent to Solicit and Designate Capacity

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The ISO is soliciting capacity offers for procurement through the ISO's Significant Event - Capacity Procurement Mechanism (CPM)

- Combination of factors have created both material difference from resource adequacy program assumptions and material changes in system conditions
- ISO seeks offers as soon as possible, preferably by July 7, for non-resource adequacy capacity available at a minimum during the net peak hours (4 PM – 9PM)
- Imports should be deliverable to the ISO *and* supported by firm (or reasonably equivalent) transmission rights to the delivery intertie
- The significant event is expected to last through October

CPM Significant Event Definition from ISO Tariff

- A substantial event, or a combination of events, that is determined by the CAISO to either result in a material difference from what was assumed in the resource adequacy program for purposes of determining the Resource Adequacy Capacity requirements, or produce a material change in system conditions or in CAISO Controlled Grid operations, that causes, or threatens to cause, a failure to meet Reliability Criteria absent the recurring use of a non-Resource Adequacy Resource(s) on a prospective basis.

Factors causing concern for resource sufficiency

- Significantly reduced hydro due to worsening drought conditions
- Unforeseen limitations on thermal resources output
- Extreme heat events unseasonably early
- Delay beyond summer of planned online dates for several new resources
- Uncertainty of further development of demand-side resources in response to emergency procurement authorizations
- Resources sufficient to meet peak demand are not always adequate to support peak demand net of wind and solar generation (*i.e.*, the net peak demand)
- Timeline of resource adequacy compliance processes provide limited ability to address the changed conditions in near term

The ISO has determined that these combined factors cause a significant event

- The assumption that a suitable planning reserve applied at the time of peak load would provide reliability 24/7 is no longer valid due to changing conditions across the day and the implications of the net peak later in the day
- The other risk factors outlined increase the need to address the change in these assumptions immediately
- The ISO's stack analysis provides more clarity on the gap associated with the change of assumptions

CPUC and CEC leadership express concerns worsening conditions

- On June 29, 2021, Marybel Batjer, President, California Public Utilities Commission, and David Hochschild, Chair, California Energy Commission, sent a letter to Elliot Mainzer, President of the ISO, highlighting the factors noted above
- The June 29 letter requests the ISO use its tariff-based authority to procure additional capacity in response to these factors



California ISO

2021 July and August Stack Analysis Net Qualifying Capacity versus Monthly Resource Adequacy Showings

2021 Stack Analysis Updated

- The ISO's stack analysis has been used to support comments in resource adequacy proceedings and in demonstrating the need for system RMR designations
- Load forecast updated to 2020 IEPR
- Master Control Area Generating Capability List
 - OASIS – downloaded 2020-06-21
- 2021 NQC List
 - CAISO website – downloaded 2020-06-21
- New resources included:
 - New resources that have obtained COD but not on NQC list
 - New resources that had not obtained COD but expected to be online
- Monthly Resource Adequacy showings for imports and other resources (see next slide)

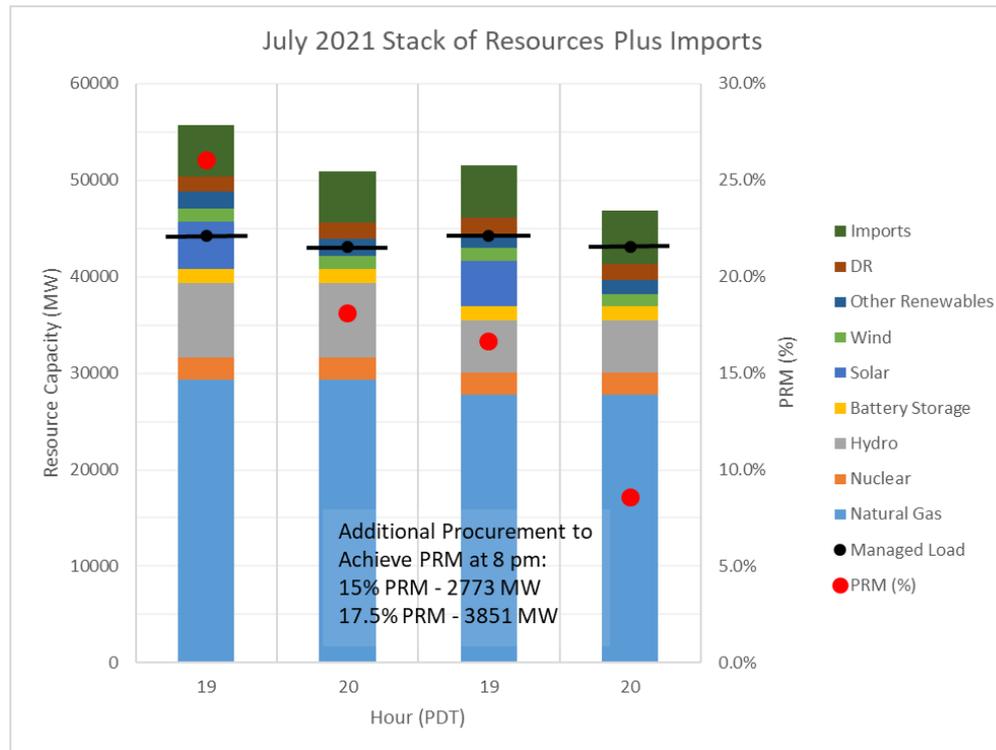
Monthly showings on the interties

	July	August
2021 RA Import Showings:	5477 MW	5702 MW
Maximum 2015 – 2020 monthly showings	6197 MW	6480 MW
Average 2015 – 2020 monthly showings	5340 MW	6095 MW
Minimum 2015 – 2020 monthly showings	3840 MW	5624 MW
Maximum Import Capability for RA	10,805 MW	10,805 MW

Net Qualifying Capacity and Resource Adequacy showings results and observations:

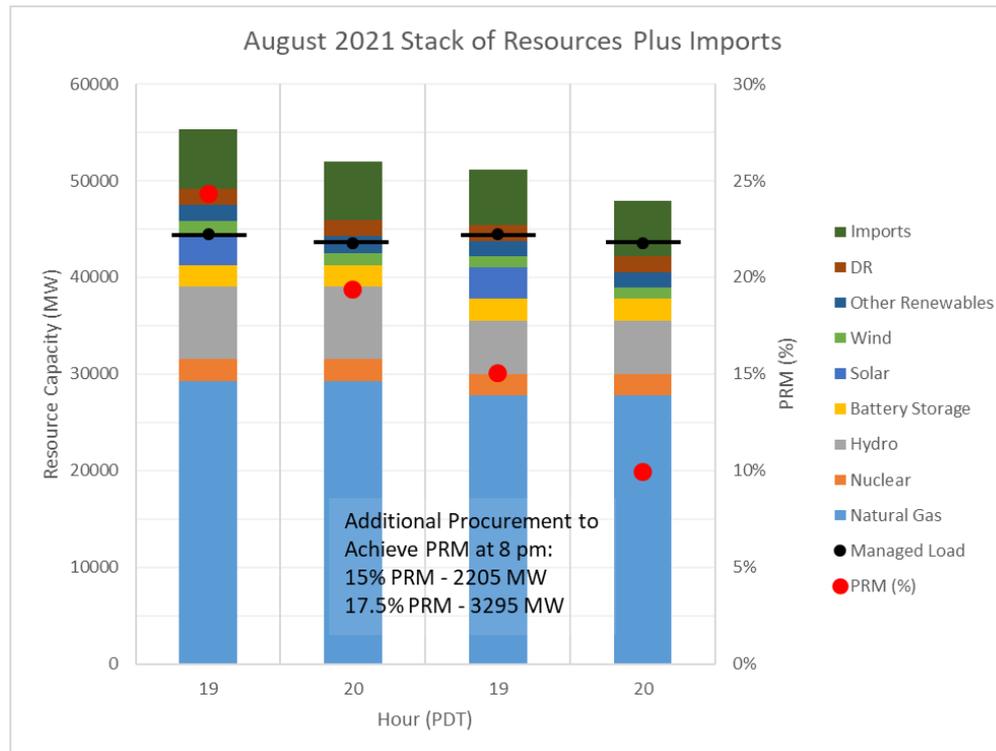
- At peak load hours:
 - For NQC and average interties at “Peak” the PRM is above 25%
 - For RA showings of the resources and interties at “Peak” the PRM is approximately 16%
- The difference in NQC vs RA showings primarily due to Gas and Hydro
 - Most gas generators have RA showings on them but not all the way up to NQC value (~1500 MW)
 - A few hydro generators with significantly lower RA showings than NQC values with a couple resources with no RA showings (~2000 MW)
- The ISO has also examined the net peak hours for July and August (see next slides)

July Stack of Resources - NQC values versus Monthly RA Showings



While the stack of NQC has a PRM of 26% at Peak and 18% PRM at 8 pm, the RA showings reflect procurement to about 16.5% PRM at Peak resulting in a PRM at 8 pm of about 8.5% - uncontracted resources and inerties would be relied on during the evening period.

August Stack of Resources - NQC values versus Monthly RA Showings



While the stack of NQC has a PRM of 24% at Peak and 19% PRM at 8 pm, the RA showings reflect procurement to about 15% PRM at Peak resulting in a PRM at 8 pm of about 10% - uncontracted resources and interties would be relied on during the evening period.

The ISO's analysis of July and August demonstrate the reliance on uncontracted resources in net peak hours

- The PRM for the NQC of resources and average historical intertie values at Peak is 24% to 26%, while the RA showings reflect procurement of only 15% to 16.5% at the Peak load period
- While the stack of NQC has an 18% to 19% PRM at 8 pm, the RA showings (net of solar generation) reflect procurement at 8 pm only achieving an 8.5% to 10% planning reserve margin
- Allowing for resources that may be procured but not shown, the gap to achieving a 15% planning reserve margin at 8 pm appears to be in the 2000 MW range.



California ISO

ISO Capacity Procurement Mechanism Process

Description of Capacity Procurement Mechanism (CPM) Significant Event Authority Designations

- ISO has authority to designate CPM pursuant to a significant event (Source: ISO Tariff Section 43.2.4)
- CPM designation is for an initial term of 30 days via the intra-monthly CPM process, with optional 60-day extension (Source: ISO Tariff Section 43.3.5)
- Planned Exercise of CPM Significant Event authority:
 - Issue 30-day procurement effective as soon as possible based on the intra-monthly CPM competitive solicitation process (CSP) for the month in which the designation will begin and additional offers solicited through the market notice
 - May issue additional designations and extensions of existing designations for August through October as conditions warrant

Timeline

- June 29 – Based on factors cited in CPUC/CEC letter, ISO concludes CPM significant event exists.
- July 1 – Public notification of intent.
- July 2 – Stakeholder call.
- July 7 – Preferred date to express interest to CIDI and submit offers to intra-monthly CSPs for months during period of expected significant event.
 - SCs may continue to submit CSP bids per BPM timeline.
- July 9 (or as soon as possible thereafter) – ISO intends to designate available capacity for 30-day terms, with 60-day extensions likely offered.
- Ongoing – ISO designate additional CPM or extend as needed.

CSP Offer Submission Process for Scheduling Coordinators

- SCs that would like to submit CSP offers should do so through **BOTH** of the following mechanisms:
 - Submitting offers in CIRA under CSP Offers > View/Submit CSP Offer Set
- AND
- Submitting a CIDI ticket with the subject line “Summer 2021 CPM Significant Event”
- For the month of July, please submit offers in CIDI only as offer period in CIRA has ended

CSP Offer Submission Process for Scheduling Coordinators (con't)

When submitting a CIDI ticket, please submit with the subject line “Summer 2021 CPM Significant Event” and include the following information:

1. Resource ID(s)
2. MW available and eligible for CPM
3. Dates the capacity is available to serve as CPM capacity
4. If the scheduling coordinator is likely to accept a 60-day designation extension were it offered
5. If the scheduling coordinator intends to seek compensation above the soft offer cap through a cost showing approved by the Federal Energy Regulatory Commission

For informational purposes, scheduling coordinators that would accept a designation based on compensation above the soft offer cap justified on a basis other than the tariff-based formula should also contact the ISO through a CIDI ticket with the above-noted subject line and resource information.

CPM Capacity Obligation

- Any resource designated under the CPM will have all the responsibilities and must-offer requirements as RA resources of the same RA type and category
- SCs offering import resources into the CSP process will need import capability at the delivery intertie
- See tariff section 43A and Reliability Requirements section 5 for more information

Next Steps:

- The ISO will evaluate capacity available through the intra-monthly CPM competitive solicitation process (CSP) and new offers as indicated earlier
- The ISO will continue to explore options to firm up capacity as quickly as possible through October
- Please notify the ISO of potential availability through CIDI or contact ISO Customer Service at 916-608-7320
- For questions, please contact Abdul Mohammed-Ali at 916-671-9678