Resource Adequacy Working Group on Path 26, Seasonal Local Requirements and Dispatchability (R.14-10-010)

CAISO

October 23, 2017

Purpose

- D. 17-06-027 directed Energy Division to establish working groups on a variety of topics.
- Today's working group covers:
  - Proposed elimination of a Path 26 requirement,
  - Establishing a seasonal local resource adequacy requirement, and
  - Defining the term "dispatchable"

Proposed elimination of a Path 26 requirement

- CAISO believes that the Path 26 requirement remains beneficial
- The justification and minimum MW need is updated every year in the local capacity technical report (see page 24 at http://www.caiso.com/Documents/Final2018LocalCapacityTechnicalReport.pdf)
  - CAISO supports maintaining it, especially with the new uncertainty introduced by once-through cooling (OTC) retirements and renewable development that can drastically change the patterns of grid flows and capacity needs
- In the CAISO's Regional resource adequacy (RA) stakeholder initiative, CAISO did not pursue a "zonal" implementation with the PacifiCorp Integration process but this issue is separate from and should not be conflated with the Path 26 requirement.

Establishing a seasonal local RA requirement

- CAISO analyzed this issue most recently in the 2013 LCR report for San Diego (http://www.caiso.com/Documents/April302012LCTStudyReport2013indocketnoR1110023.pdf)
- There are significant challenges to establishing a seasonal local RA requirement including:
  - In the 2013 results for San Diego, CAISO found that the need under “other” seasons was almost identical to summer need. However, the data analytics, time, and resources required to conduct studies are not trivial and do not always lead to a reduction of requirements in non-summer months. In fact, for smaller areas (such as those smaller than San Diego), the non-summer requirements may actually be higher than summer.

Establishing a seasonal local RA requirement (cont'd)

- There are challenges to establishing a seasonal local RA requirement including (cont'd):
  - Currently the CAISO conducts deliverability studies during the peak demand period because it is assumed that the "loss of resource deliverability" at lower load levels is manageable. However, If the paradigm is changed the CAISO would want to assure that resources required to meet local reliability standards are deliverable. Therefore, it may be necessary to run deliverability studies in order "seasons." RA resources that count today for RA in all seasons may become undeliverable in seasons "other than peak" due to decreased system load. This will add significant complexity to the RA program and to resources that become partially deliverable during the year.

Establishing a seasonal local RA requirement (cont'd)

- There are challenges to establishing a seasonal local RA requirement including (cont'd):
  - Generators have raised the concern that if they are only needed for the summer season, they would seek to recover all of their costs during this period. However, if CAISO needs these resource during non-summer months (as may happen during maintenance periods, abnormal system conditions etc.), then backstop may be needed, even though the local RA program was designed to eliminate the need for the CAISO to enter into RMR contracts for resources needed to meet the LCR criteria.
- Given the above concerns and results of analysis, the current local RA construct is easier to manage and implement, provides the ISO with resources needed to maintain local reliability standards year round and arrives at least cost solution for all parties (ISO, CPUC, LRAs, LSE and resources owners) compared to a "seasonal approach."