

September 8, 2020

Mr. Huette,

You have requested a short statement clarifying how reserves management is done under the WECC and NERC mandatory reliability standards, and the relationship between that and the posted Available Capacity figures on the Today's Outlook web page.

The ISO posts Available Capacity figures on the Today's Outlook web page to give the public a general indication of the overall capacity that may be available to serve the forecasted demand at that time. Under normal conditions, this figure changes over the course of the day. In addition, system operating conditions can reduce or restrict the ability of some of the resources included in the total to produce or deliver all of their energy to serve load and this variance can be significant.

This Available Capacity number is a different value than the sum of load and contingency reserves. The ISO and all other balancing authority areas are required to have contingency reserves in addition to sufficient resources to meet their current load. The contingency reserves must be available to address the unexpected failure of a system component, such as a generator or transmission line, in order to prevent more drastic outcomes which could include uncontrolled and long duration outages or cascading blackouts that could extend across the western states region.

The National Electric Reliability Corporation's standard BAL-002-WECC-2, <https://www.nerc.com/files/BAL-002-WECC-2.pdf>, requires that each balancing authority area maintain a minimum amount of contingency reserve at all times, with one limited exception during the period after a balancing authority uses its contingency reserves. The amount of contingency reserve must be the greater:

- The amount of contingency reserve equal to the loss of the most severe single contingency;
- The amount of contingency reserve equal to the sum of three percent of hourly integrated load plus three percent of hourly integrated generation;
- At least half of the minimum amount of contingency reserve, is spinning operating reserve

The ISO must have available contingency reserves that meet all the requirements above; this minimum will be approximately 6% of load. If these contingency reserves are not available, the ISO may be required to interrupt load in order to protect the reliability of the Western Interconnection.

The Available Capacity number posted on Today's Outlook, when viewed together with expected load, gives a general indication of whether there be enough capacity available to both serve load and meet contingency reserve requirement. At any given time, however, the full capacity identified there may not be available to supply the existing load because of system operating conditions. Accordingly, to better understand real-time operating conditions, including the level of reserves available at that time, interested parties should rely upon official ISO notifications. Additionally, detail data are available on the ISO's Open Access Same-time Information System (OASIS).

Thank you and please contact ISOMedia@caiso.com should you have further any further inquiries.