



Western Power Trading Forum Track 1 Resource Adequacy Proposals

California Public Utilities Commission
RA Workshop
February 22-23, 2018

WPTF Proposal #2:

Effective Load Carrying Capacity

- ELCC is an issue long overdue for Commission resolution
- R.14-10-010 proposals identified how behind-the-meter solar photovoltaics (BTM PV) significantly affect ELCC
- The current practice significantly increases the ELCC ascribed to solar resources
 - Significant negative implications for CPUC energy policy and system reliability
 - Inflates the capacity value of solar

- The Commission should direct that BTM PV should be expressly modeled as a supply resource
 - Last year's ELCC estimates did not include it, as shown by the August result
 - Although initial Energy Division estimate for solar ELCC approximated 30% of nameplate capacity (including BTM PV), final results backed out BTM PV, increasing the solar ELCC to about 40% of nameplate capacity
- While it can be argued that this is justified by the fact BTM PV is not explicitly counted in RA requirements, this ignores the facts that:
 - Resulting reduced peak load forecasts affect RA requirements; and
 - Pushing the potential for load loss later in the day to a time when less solar is available means the solar contribution to reliability is diminished.

➤ Energy Division's February 24, 2017, proposal explained:

➤ *“The effect that BTM PV has on overall solar ELCC stems from the fact that as solar penetration increases, peak load net of solar generation shifts further into the evening when solar generators cease generating. This shift in load hours affects average solar ELCC. While it may not be the time to give RA value to BTM PV, the large quantity of BTM PV generating electricity in California makes its effect on ELCC important to quantify.”*

➤ If the Commission continues not to expressly model BTM PV, the impact will be seen in ELCC calculations that do not accurately reflect the extent to which this resource can provide the resources necessary for a reliable grid.

Proposal #2 Conclusion

The Commission should direct that BTM PV is to be expressly modeled as a supply resource so that the ELCC estimates adopted for next year include it.

If BTM PV is not expressly modeled as a supply resource, the effects of BTM solar should be accurately represented in the load forecasts used.