

Comments of the California Wind Energy Association on the CAISO Proposed Deliverability Assessment Methodology Revision Paper of July 29, 2019

Contact Information: Nancy Rader
e-mail: nrader@calwea.org
phone: 510-845-5077

Dariush Shirmohammadi
e-mail: dariush@gridbright.com
phone: 310-858-1174

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Summary and Recommendations

The California Wind Energy Association (CalWEA) appreciates the opportunity to comment on the California Independent System Operator's (CAISO) Generator Assessment Methodology Revisions paper ("Revisions Paper") of July 29, 2019.

The Revisions Paper starts by summarizing the description of the deliverability assessment methodology that CAISO developed in 2018 and then discusses a number of informational and "active" mitigation measures for the potential transmission congestion that may result from the implementation of this new methodology. The Revisions Paper correctly explains that the deliverability assessment process is intended to accurately determine the NQC (RA capacity contribution) of wind and solar resources and, hence, addresses system reliability concerns. The Revisions Paper then acknowledges that the potential transmission congestion that is contemplated to occur under the new deliverability assessment methodology could increase the curtailment of wind and solar resources, thereby creating a commercial concern. At the stakeholder meeting of 8/5/2019, CAISO additionally clarified that unless and until an active measure to mitigate the contemplated transmission congestion (generation curtailments) is fully developed and incorporated into the GIP process, the CAISO will not implement its new deliverability assessment methodology.

For reasons that we will explain below, CalWEA strongly recommends that the CAISO promptly implement its new deliverability assessment methodology for the Transmission Plan Deliverability (TPD) allocation process for Cluster 11 (slated after November of 2019) and for Phase 2 studies for Cluster 12 in mid-year 2020. CalWEA also recommends that the CAISO implement the following process in order to evaluate and mitigate the contemplated transmission congestion which may be associated with the implementation of the new deliverability assessment methodology:

1. Starting with Phase 2 studies for Cluster 11, CAISO should use the system condition noted in the Revisions Paper for its Off-Peak Deliverability Assessment ("OPDA"). CAISO should also report, in the Phase 2 study results reports, not only the OPDA-identified overloaded facilities and upgrades but also, for OPDA upgrades, all resources that would experience curtailments -- plus some indicator of the level of curtailment -- in the event the upgrades

are not implemented. At a minimum, the shift factor of the resource with respect to overloaded facilities should be identified.

2. In parallel with the above informational measure, CAISO should work on developing a detailed “active” curtailment management solution through a stakeholder process. In that regard, a methodology in line with Option 5 of the Revisions Paper offers a promising starting point.

Discussion

The CAISO and CPUC staff have identified a potential near-term reliability crisis due to a forecasted scarcity of RA capacity. In addition to the imminent retirement of many of the state’s thermal resources, a principal contributor to this reliability crisis is the fact that CAISO’s peak daily load has shifted to evening hours when more than 17 GW of in-front-of and behind-the-meter solar resources are fully or partially unable to meet the demand. As a result of this load shift, existing solar resources with FCDS deliverability status have seen their RA capacity value diminish to about half its previous value, a fact recognized by the CPUC’s relatively new ELCC methodology for determining wind and solar RA capacity value. Under these circumstances, it is necessary that the CAISO’s deliverability assessment methodology recognize that this reduction in RA capacity of FCDS solar resources will free up transmission system deliverability capacity that is no longer needed by these existing resources. In turn, this will allow additional solar and wind resources to gain FCDS deliverability status and contribute to resolving the state’s RA capacity shortage. Implementing the CAISO’s proposed new deliverability assessment methodology will accomplish this.

CalWEA is concerned that, should CAISO decide to indefinitely postpone the implementation of its new deliverability assessment methodology, CAISO will become a contributor to the RA capacity shortage problem by tying up transmission deliverability capacity. A decision to postpone implementation will contribute to two potentially undesirable outcomes:

1. More thermal generation capacity that is on the verge of retirement, for regulatory or commercial reasons, will get re-contracted to provide the needed RA capacity because new wind and solar resources that could otherwise fulfill RA needs, without greenhouse-gas emissions, will be blocked from the market; and
2. Existing FCDS solar resources will add storage to their facilities in order to transfer the transmission deliverability capacity that they no longer need to that storage, rather than release the capacity for use by new renewable resources that seek to acquire FCDS deliverability status and offer RA capacity. The result of such activity would be to limit competition in the RPS market to the detriment of California ratepayers. Moreover, resources paired with storage are typically not operated for the benefit of the grid but rather to maximize the resource’s PPA revenues.

In regards to generation curtailment that may occur due to the implementation of the new CAISO deliverability assessment methodology, such an outcome would only come about if resource development and procurement communities in California fail to conduct proper due diligence related to the methodology’s reforms and incorrectly conflate the concept of deliverability for the purpose of obtaining FCD status with actual transmission congestion and resource curtailment. Such an outcome is

highly unlikely since the resource development community (particularly its investment arm) and load serving entities have already become quite sensitive to transmission congestion and for commercial purposes will avoid resource development/procurement in areas where serious congestion issues may arise. To facilitate such analysis, CalWEA recommends that the CAISO provide ample information about the potential for transmission congestion and curtailments by expanding its OPDA process as follows:

1. Use the OPDA study scenario discussed in the Revisions Paper;
2. Clearly identify every transmission facility (line, transformer, switch, etc.) that is overloaded in the OPDA, including the condition of overload (normal/contingency);
3. Clearly identify whether the contingency overload is modeled in the CAISO real-time congestion management protocols and system;
4. Clearly identify all resources whose shift factor on the overloaded transmission facilities exceeds 5% and publish the said shift factor; and
5. To the extent possible, provide the level of curtailment of individual resources in the absence of the OPDA-identified upgrades, preferably using a production simulation study.

CalWEA submits that the aforementioned information will virtually ensure that no development of resources will occur where levels of curtailment would be unacceptable in the absence of the needed OPDA upgrades.

Finally, CalWEA recommends that CAISO begin the stakeholder process to develop an active curtailment management process starting with Option 5 of the Revisions Paper as such a solution.