**LSA and SEIA COMMENTS ON PROPOSED REVISION REQUEST 1259:**

**Generator Interconnection and Deliverability Allocation Procedures**

***(BPM Section 6.1.1.4 - 6.1.1.7)***

The Large-scale Solar Association (LSA) and the Solar Energy Industries Association (SEIA) appreciate the opportunity to comment on Proposed Revision Request (PRR) 1259.

PRR 1259 would revise the BPM for Generator Interconnection and Deliverability Allocation Procedures (GIDAP), Sections 6.1.1.4 through 6.1.1.7. The reason given for the proposed changes is to “Implement the area and local off-peak network upgrades in the deliverability methodology enhancement approved by FERC.”

LSA and SEIA have several concerns about PRR 1259. These concerns are summarized below and explained in more detail in the sections following.

These concerns are considerable and substantial. LSA and SEIA strongly recommend that the CAISO hold a stakeholder process to explain the proposed changes and allow stakeholders to understand them, and provide input as needed.

**Summary of LSA and SEIA concerns**

* **The changes are not properly made through a PRR without further due process.** Generally, the changes proposed in PRR 1259: (1) Go far beyond the limited Off-Peak Network Upgrade (OPNU) changes approved by FERC; and (2) have not been discussed with stakeholders. Likewise, the implications of these changes are not explained and have not been discussed with stakeholders.
* **PRR 1259 proposes material changes in the current Area Deliverability Constraint (ADC) definition.** The ADC is used to distinguish on-peak Local Deliverability Network Upgrades (LDNUs) from Area Delivery Network Upgrades (ADNUs). These changes were not considered or approved by FERC or discussed with stakeholders.

For example, it appears that these changes would make it easier to classify an on-peak deliverability constraint as an ADC, i.e., classify more mitigation upgrades as ADNUs instead of LDNUs. While this might reduce upgrade financing costs for new generation seeking Full Capacity Deliverability Status (FCDS), it would likely reduce the number of constraints relieved, reduce deliverability awards in the annual allocation process, and increase congestion.

* **PRR 1259 proposes an Area Off-Peak Constraint (AOPC) definition that suffers from the same issues as the proposed modified ADC definition.** The AOPC would distinguish Local Off-Peak Network Upgrades (LOPNUs) from Area Off-Peak Network Upgrades (AOPNUs). While the AOPC concept was approved by FERC after vetting with stakeholders, the proposed AOPC definitions were not considered or approved by FERC or discussed with stakeholders.

The proposed AOPC definition reflects the proposed ADC definitions, including the proposed lower ADC thresholds. As such, they would make it relatively easy to classify an on-peak deliverability constraint as an AOPC, i.e., classify more mitigation upgrades as AOPNUs instead of LOPNUs. As with DNUs, this might reduce upgrade financing costs for new generation seeking Off-Peak Deliverability Status (OPDS), but it would likely also reduce the number of constraints relieved, providing less congestion mitigation than if the AOPC definition had a higher threshold.

**Detailed comments on proposed Area Deliverability Constraint changes**

The current and proposed ADC definitions are shown below, followed by LSA/SEIA questions.

**AREA DELIVERABLITY CONSTRAINT DEFINITIONS**

(Types 1-4 = current definitions; Types ADC1-4 = proposed definitions)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ADC TYPE** | ***# OF GENERATORS CONTRIBUTING TO CONSTRAINT*** | ***CONSTRAINT EXCEEDANCE*** | ***MITIGATION COST*** | ***OTHER*** |
| ***CURRENT DEFINITIONS: Constraint meets one of the following criteria:*** | | | | |
| 1 | Transmission system operating limit that constrains all/most of generation already constrained by a previously identified ADC | | | |
| 2 | >20 | Total MWs of new generation among the contributing buses exceeds the Renewable Base Portfolio | --- | --- |
| 3 | <20 | >$100M | --- |
| 4 | --- | --- | >$100M | Contributing generators not in a Renewable Energy Zone |
| ***PROPOSED DEFINITIONS: Constraint meets one of the following criteria:*** | | | | |
| **ADC-C1** | Transmission system operating limit that constrains all/most of generation already constrained by a previously identified ADC | | | |
| **ADC-C2** | >20 | Total MW of new generation contributing to constraint exceeds MWs in Renewable Base Portfolio mapped w/in 5% DFAX circle, as defined in On-Peak Deliverability Assessment Methodology | --- | --- |
| **ADC-C3** | --- | >$50M | --- |
| **ADC-C4** | >10 | >$20M | Constraint caused by contingency on Bulk Electric System |

**Questions about proposed changes**

* **Number of generators criterion:** There is no minimum number of generators required for Criteria 3, nor is one proposed for ADC-C3. However, while Criteria 4 requires no minimum number of generators, ADC-C4 would require a minimum of 10 generators. What is the reason for the change?
* **Constraint exceedance criterion:** The definitions for both Criteria 2-4 and ADC-C2 through C4 seem similar, but the latter also mention the 5% DFAX circle from the On-Peak Deliverability Assessment Methodology while for former do not. Is the proposed new definition simply the same as the current definition but with some additional detail added, or is the modification a change in substance?
* **Mitigation cost threshold:** This seems to be the most notable change. The $100 million cost thresholds for Criteria 3 and 4 would be lowered to $50 million and $20 million for ADC-C3 and ADC-C4 respectively. What is the rationale for reducing the thresholds to these much lower levels?
* **“Other criteria:”** The proposed change seems logical but need to be explained.
* **Impact on LDNU and ADNU categorization**: As noted above, lowering the dollar thresholds would seem to lead to more constraints being classified as ADCs instead of local constraints, and thus more upgrades to mitigate those constraints being classified as ADNUs instead of LDNUs. Combined with Option A election by virtually all new generation projects (i.e., no funding for ADNUs to mitigate ADCs), this would seem to indicate less constraint mitigation and, in turn, less deliverability available in the annual TPD Allocation process.

Does the CAISO agree with this likely outcome? If so, was this considered in the CAISO’s recommendation to lower the ADC cost thresholds, and how?

**Detailed comments on proposed Area Off-Peak Deliverability Constraint definitions**

The current and proposed AOPC definitions are shown below, followed by LSA/SEIA questions.

**AREA OFF-PEAK CONSTRAINT DEFINITIONS** (proposed)

|  |  |  |  |
| --- | --- | --- | --- |
| **AOPC TYPE** | ***# OF LCRIGs CONTRIBUTING TO CONSTRAINT*** | ***CONSTRAINT EXCEEDANCE*** | ***MITIGATION COST*** |
| **AOPC-C1** | Transmission system operating limit that constrains all/most of generation already constrained by a previously identified AOPC | | |
| **AOPC-C2** | >20 LGRIGs\* w/a fuel/energy source “substantially occurring” in off-peak conditions | Total MW of new generation contributing to constraint exceeds MWs in Renewable Base Portfolio mapped w/in 5% DFAX circle, as defined in Off-Peak Deliverability Assessment Methodology | ---  --- |
| **AOPC-C3** | --- | >$50M  --- |
| **AOPC-C4** | --- | --- | **Mitigation cost > avoided curtailment cost.**  Mitigate cost is based on previous interconnection studies or Per-Unit Cost, adj. for construction duration. Avoided curtailed energy is based on a complicated formula described in the PRR. NPVs assume a 40-year life & 7% discount rate. |

\* *Location-Constrained Resource Interconnection Generator (mostly wind or solar).*

**Questions about proposed definitions**

* **Number of generators criterion:** Proposed ADC-C4 would require a minimum of 10 generators, but there is no minimum for AOPC-C4. Why is there a difference?
* **Constraint exceedance criterion:** Currently applies to Criterion 4 and would apply to ADC-4, but is not proposed to apply to AOPC-C4. Please explain the difference.
* **Mitigation cost threshold for AOPC-C3:** This is the same proposed threshold as for ADC-3, and the same questions about the reduction from Criterion 3 apply.
* **Mitigation cost threshold for AOPC-C4:** This is among the issues of greatest concern in PRR 1529. The CAISO is proposing a complex and entirely new cost-effectiveness test; applicability of a cost-effectiveness concept here is entirely new, and neither the methodology nor the assumptions have been vetted with stakeholders. There is no way this proposal can be characterized as simply a “tariff interpretation,” and it should not be added to CAISO rules through a PRR with no open process for its development.