

DRAFT

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The following mark-up provides proposed modifications to Special Case for “Behind the Meter” Expansion (included in Section 5.35 of the Straw Proposal at pages 38-39) to allow a conventional repowering project or other reconfiguration of generation at an existing interconnection to be treated comparably.

Generator Interconnection Procedures Phase 2 Straw Proposal Section 5.3.5 Special Cases

Existing Project Reconfiguration and/or~~Behind the Meter~~ Expansion

Stakeholders have requested the ISO discuss options for allowing generating units to expand, repower, -or reconfigure capacity at the point of interconnection for an existing project so long as that repowered or reconfigured capacity does not exceed the maximum historic qualifying capacity, or under a previously executed Generator Interconnection Agreement (GIA)~~behind the ISO revenue meter~~ so long as their output would not exceed the capacity level that was formally studied and agreed to in the GIA~~Generation Interconnection Agreement~~ (“GIA Capacity” or “GIAC”), without going through the standard generation interconnection study process. The stated stakeholder goal is to obviate the need to go through an interconnection process for the capacity expansion, repowering or reconfiguration, provided that the interconnection customer agrees that a project that increases the -additional capacity, once in-service, will be subject to appropriate operational restrictions. In other words, according to the stakeholder proposal these operational restrictions would effectively ensure that the change would not be a “Material Modification” under the GIP and, thus, would not require a new interconnection request or new studies. The underlying rationale is that such expansion of the maximum capacity of the plant may facilitate its operation at higher capacity factors and improve and optimize the utilization of its interconnection facilities and the overall transmission grid.

The technical/operational criteria and restrictions proposed below reflect the stakeholder proposal for the operation of the ~~behind the meter~~ expanded GIAC, repowering or reconfigured capacity are intended to make it possible to allow such modifications~~the addition of the expanded capacity~~ without a formal interconnection study.

Business Criteria:

1. The interconnection customer seeking an increased GIAC shall have one opportunity to request a capacity expansion for a project before its COD. After the COD of a project, the IC may apply once every two calendar

- years for a capacity expansion. The current owner of a conventional repowering project or other reconfiguration of generation at an existing interconnection (existing project reconfiguration) may at any time request reconfiguration of its existing interconnection capacity.
2. The cost of reviewing such request and for adherence with technical requirements shall be borne by the IC.
 3. The interconnection status (full-capacity or energy-only) of the capacity expansion must be the same as the interconnection status of the formally studied project. Repowering or reconfiguration of an existing project shall have full deliverability up to the maximum historic qualifying capacity.
 4. In the case of an expanded GIAC, Tthe GIA shall be amended to reflect the revised operational features of the capacity expansion.
 5. The IC can at any time request that ISO formally study the expanded GIAC capacity in the GIP study process and to formally add that capacity to its GIAC so that the expanded capacity can be released from the operational restrictions after the GIP studies are completed and the IC has complied with all the relevant requirements.

Technical Criteria:

1. The total nameplate capacity of the expanded generation plant shall not exceed in the aggregate the lesser of 25% of its GIAC or 100 MW. Accordingly, regardless of the right to seek an increase every two years that right will terminate once the cap is achieved changes.
2. The GIAC behind the meter capacity expansion can only take place after the project COD and after all network upgrades for the project are in-service.
3. The reactive and short circuit electrical characteristics of the expanded capacity generation (LVRT, VAR control, and maximum fault current contribution) must be equal or superior to the formally studied generators, and any reduction in VAR control associated with repowering or reconfiguring an existing project would need to be studied to verify no violation of voltage limits or other reliability criteria under contingencies necessary to meet NERC standards. -
4. If capacity is increased, then Tthe plant shall have its expanded capacity under a separate breaker called the —expansion breaker at all times. Alternatively and with ISO/PTO consent, the plant operator may decide whether the generation modules that will be tied to the expansion breaker can be a mixture of GIAC facilities and the expansion facilities (total capacity behind the expansion breaker to remain equal to or greater than the planned increase in behind the meter capacity-expansion figure).
5. Unless specifically requested by the ISO, the total output of the generator shall not exceed its GIAC or the maximum historic qualifying capacity at any time. The ISO shall have the authority to trip the expansion breaker if the plant output exceeds its GIAC. The ISO may request that the generator provide more output than its GIAC, consistent with the

- operational and technical constraints specified for the generating unit(s) in the CAISO Master File.
6. For Full Capacity (FC) interconnection, the Net Qualifying Capacity for the modified facility cannot exceed the on-peak capacity level assumed in the prior Deliverability Assessment or the maximum historic qualifying capacity. As noted in the business protocols, the interconnection customer can submit an interconnection request for a Deliverability Assessment in a future GIP application window to increase the NQC beyond these that levels.

The implications to competition, reliability and even Deliverability of this stakeholder proposal must be thoroughly assessed and vetted by the ISO and the larger stakeholder community. For instance, the proposal notes that total output shall not exceed the GIAC or historic qualifying capacity at any time. Will violation of that technical requirement constitute a default under the LGIA or simply an economic consequence whereby the resource cannot be paid for metered output greater than the GIAC or Pmax? Is that limitation ultimately politically sustainable, such that the practical outcome of the proposal is to restrict instances of curtailment by tripping the expansion breaker only for reliability purposes, i.e., during system emergencies? Similarly, are there unintended consequences of permitting a capacity expansion without a formal study process based on a representation that the short circuit and other electrical characteristics are equal or superior to the original capacity? Adoption of such a position would seem to also have implications for repowering projects that propose switching technologies.

Given these questions and concerns, the ISO requests comments not only on the proposal's specific elements, but also whether the ISP provides sufficient, if not in some cases greater, flexibility to accommodate the objectives of the ~~behind the meter~~ proposal to allow expanded GIAC without potentially compromising reliability.