

Stakeholder Comments Template

Subject: Generation Interconnection Procedures Phase 2 ("GIP 2")

Submitted by	Company	Date Submitted
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Comments on topics listed in GIP 2 Draft Final Proposal:

GenOn appreciates the progress reflected in the Draft Final Proposal in providing additional clarity regarding the interconnection of repowered and reconfigured projects.

Repower and reconfigured projects that should be provided a streamlined interconnection process under the CAISO Tariff include any project involving modification of generating facilities at an existing project site (or an alternate site that nonetheless uses the same Point of Interconnection if such relocation is required due to environmental factors), subject to reasonable limits on the expansion of such capacity. Such projects might include modifications to existing generating facilities necessary to comply with the State's policy regarding Once-through Cooling (OTC), repowering to increase efficiency and/or flexibility of existing generating facilities, complete replacement of existing generating facilities, or the partial replacement of existing generating facilities, including wind or solar generation that meets the CAISO's technical requirements (e.g., applicable design specifications, including power factor and voltage regulation requirements specified under the CAISO Tariff.)

We provide comments below on the alternate paths described in the Draft Final Proposal, and how they should apply to such projects. We then offer general comments on why the CAISO should take every reasonable opportunity to clarify and simplify the interconnection of repowered and reconfigured projects. By doing so, the CAISO will not only assure that the efficiency and equity objectives of the GIP are achieved, but can also align the GIP with the CAISO's own transmission planning process and the State's environmental policies, as discussed further below.

Work Group 3

 Interconnection Refinements to Accommodate QF conversions, Repowering, Behind the meter expansion, Deliverability at the Distribution Level and Fast Track and ISP improvements



The ISO states that it proposes to retain the basic structure of Section 25 of the ISO Tariff. As the CAISO considers refinements to Section 25 it should modify the applicability of that section from the relatively narrow definition of "Generating Unit" to refer more broadly to the generating facilities of an entire power plant, which may be composed of multiple Generating Units. Broader applicability is consistent with the idea of facilitating the repowering or reconfiguration of existing resources.

The CAISO should also assure that full deliverability up to the historic studied MW is available to repowered or reconfigured projects, and any required network reliability upgrades should be limited to those based on the incremental short circuit fault duty and flows when comparing the proposed repowered or reconfigured generating facilities to the existing generating facilities.

- a. Application of Path 1-5 processes
 - Comments:

Path 1 – Interconnection Procedures Do Not Apply: The CAISO states that current criteria regarding the applicability of the interconnection procedures will be preserved. If there is no increase in nameplate capacity and the project will not cause a potential violation of Applicable Reliability Criteria, then a project will be eligible for "Path 1" and will not be required to go through the interconnection procedures.

GenOn supports the CAISO's efforts to better define what potential changes may represent a potential reliability concern and to document the process including the information to be submitted, assessment process and timing in the upcoming BPM on the Generator Interconnection Process. The CAISO should specifically consider how those criteria would apply for repowered and reconfigured projects.

Path 3 – Fast Track: In describing "Path 3", the CAISO proposes to extend availability of the Fast Track process to repowered projects. GenOn supports this proposal, but suggests the CAISO expand this reference to more broadly facilitate the interconnection of existing projects that are repowered or reconfigured.

So long as significant synchronous generation is included in the reconfigured project to meet Applicable Reliability Criteria, the substitution of asynchronous renewable generation should also be encouraged as an efficient use of the existing transmission network that is consistent with California's public policy goals. Any of these projects should have the same opportunity for a streamlined interconnection process based on objective reliability criteria.

The CAISO should clarify that to accommodate the repowering or reconfiguration of existing projects and the broader proposed use of the Fast Track process, references in the Generator Interconnection Procedures to "Small Generating Facility" should be changed to additionally refer to any repowering or reconfiguration of existing facilities, and the Fast Track screens described in Section 5.3 of Generator Interconnection Procedures Appendix Y of the Tariff should be revised to refer to relative impacts due to the change in electrical characteristics between a) the existing generating facilities, and b) the generating facilities after the proposed repowering or reconfiguration.

Any repowered or reconfigured project that meets reasonable criteria regarding the nature and significance of changes in electrical characteristics should not involve network upgrades beyond the Point of Interconnection, and should go through the Path 3 Fast Track Process.



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Path 4 – Independent Study Process: The CAISO proposes to modify the Independent Study Process (ISP) under Path 4 to include possible expansion of capacity through the "behind the meter" proposal, which would allow projects that meet short circuit fault duty and flow based tests under the ISP to increase capacity by up to 100 MW. Should a repowered or reconfigured project be ineligible for the Fast Track process under Path 3, then it should be eligible for study under the ISP under comparable terms.

Path 5 – Queue Cluster: The Final Draft Proposal's description of Path 5 suggests that any repowered or reconfigured project seeking full deliverability should go through the cluster process. First, the CAISO should clarify that any proposed repowering or reconfiguration of an existing project would be assured of full deliverability up to the amount of the previously studied capacity (i.e., the historic PMax or Net Qualifying Capacity). The CAISO should also clarify that the only repowering or reconfiguration projects that would be required to go through the Path 5 cluster process would be those that include significant increases in capacity over the previously studied studied capacity of the existing generating facilities.

Other Comments:

The CAISO notes that "any potential changes must be clearly linked to a well defined objective and benefits to one group of interconnection customers must be carefully weighed against the impacts to other interconnection customers and the overall efficiency of the ISO's interconnection process." By clarifying the generator interconnection procedures to facilitate repowering and reconfiguration of existing projects, the GIP will:

- a) Better complement the CAISO's transmission planning policy,
- b) Support OTC compliance and leverage existing transmission infrastructure,
- c) Encourage interconnection of projects in local reliability areas where many OTC plants are located, and
- d) Facilitate improvements to existing capacity necessary to reliably integrate renewable resources.

One benefit of the CAISO's transmission planning process is that it considers public policy requirements which the CAISO believes will increase the number of transmission upgrades completed as a result of proactive transmission planning, while reducing the proportion of network upgrades that would otherwise be triggered by individual generator interconnection requests. The CAISO also applies several transmission planning criteria that support a "least regrets" approach to identifying policy-driven elements that will minimize the risk of stranded investment. Clearly, improving the use of the existing transmission network by facilitating the interconnection of repowered and reconfigured projects at existing generating facilities is consistent with this least regrets principle guiding investment in new transmission capacity.

In keeping with the CAISO's objective of adapting its interconnection processes and procedures to conform to resource policies and market trends, the CAISO has an opportunity to complement California's OTC policy. The CAISO is on record as supporting the State Water Resources Control Board's policy regarding the substantial elimination of OTC.¹ Additionally,

¹ The CAISO joined the CPUC and the CEC in identifying steps to plan the changes to generation and transmission infrastructure necessary to support the SWRCB's policy on once-through cooling. See: *"Draft Joint Agency Staff Paper - Implementation of Once-Through Cooling Mitigation Through Energy Infrastructure Planning and Procurement"*, July 2009, Publication CEC-200-2009-013-SD.



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California has significant investment in the transmission network to interconnect once-through cooled power plants, and facilitating interconnection of retrofitted capacity or replacement generation will support the State's policy to substantially reduce reliance on once-through cooling. Depending on environmental feasibility and commercial viability, such a policy could also support early compliance with the OTC policy goals, while helping assure the efficient use of the transmission network.

Finally, as noted by the CAISO's Department of Market Monitoring, the CAISO will need to rely on significant amount of existing capacity in local reliability areas to integrate renewable resources:

"However, a substantial portion of the state's 15,000 MW of older gas-fired units will need to be maintained and retrofitted in the coming years to meet local reliability requirements and to provide the ramping and backup capacity needed to integrate large volume of renewable generation. Virtually all of this capacity is located in transmission constrained load pockets and will need to be retrofitted to eliminate once-through-cooling over the next decade to continue in operation."²

It is important to note that generator interconnection policy is just one hurdle to bringing repowered or reconfigured projects to commercial operation, and other significant challenges exist in obtaining the necessary permits, contracts and financing. However, adopting policies for generator interconnection that streamline the process for repowered and reconfigured projects is consistent with the CAISO's objectives for GIP enhancements, and complements the CAISO's transmission planning policy as well as the State's environmental policies.

² CAISO Department of Market Monitoring, *"2010 Market Issues and Performance Annual Report"*, page 10.