

133 FERC ¶ 61,223
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

California Independent System Operator Corporation Docket No. ER11-1830-000

ORDER CONDITIONALLY ACCEPTING TARIFF REVISIONS

(Issued December 16, 2010)

1. On October 19, 2010, the California Independent System Operator Corporation (CAISO) filed proposed tariff revisions to its generator interconnection process. With this filing, CAISO intends to harmonize its large generator interconnection procedures (LGIP) and its small generator interconnection procedures (SGIP).¹ According to CAISO, the proposed tariff revisions, known as the generator interconnection procedures (GIP), are necessary to address inefficiencies in CAISO's current process for interconnecting small generators to its transmission system due to an increasing volume of small generator interconnection requests and the conflict between CAISO's study processes for small and large generators. CAISO states that the proposal addresses these issues by adopting, in most cases, an integrated cluster study process for both small and large generators. This order conditionally accepts CAISO's proposed tariff revisions, subject to the inclusion of additional information on the GIP as part of the quarterly reports CAISO currently submits pursuant to an earlier Commission order on CAISO's generator interconnection process reform (LGIP quarterly reports).²

¹ For purposes of this proceeding, small generators are facilities with a capacity of 20 MW or less, and large generators are facilities with a capacity greater than 20 MW.

² *Cal. Indep. Sys. Operator Corp.*, 124 FERC ¶ 61,292, at P 200 (2008).

I. Background

2. CAISO's LGIP and SGIP were adopted to comply with the Commission's directives in Order No. 2003³ and Order No. 2006,⁴ to facilitate the interconnection of new generation while preventing undue discrimination, preserving reliability and increasing competitive energy supply in wholesale electricity markets.

3. CAISO states that its SGIP and the accompanying small generator interconnection agreement (SGIA), which incorporate the directives of Order No. 2006, have successfully insured that small generator interconnection customers in California have open access to CAISO's transmission system.⁵ However, CAISO explains that since 2008 it has experienced a large and rapidly increasing volume of small generator interconnection requests that has made it impossible to study the projects serially within the timelines provided by the current SGIP.⁶ Prior to 2008, CAISO states it received fewer than 10 small generator interconnection requests annually. By contrast, CAISO states that since 2008, when it reformed its interconnection procedures for large generators, it has received over 180 small generator interconnection requests, of which 130 were received during 2010 alone.⁷ CAISO states that it currently has 160 active small generator

³ *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

⁴ *Standardization of Small Generator Interconnection Agreements and Procedures*, Order No. 2006, FERC Stats. & Regs. ¶ 31,180, *order on reh'g*, Order No. 2006-A, FERC Stats. & Regs. ¶ 31,196 (2005), *order granting clarification*, Order No. 2006-B, FERC Stats. & Regs. ¶ 31,221 (2006).

⁵ CAISO Transmittal Letter at 4.

⁶ *Id.* at 6. CAISO further states that the increase may become even larger, as some large generator developers appear to have begun breaking up large generator projects into smaller-component projects for study as small generator projects.

⁷ *Id.*

interconnection requests under the SGIP, requesting interconnection for a total of 2,978 MW.⁸

4. CAISO further states that a primary driver of the increasing number of both large and small generator interconnection requests is California's renewable portfolio standard (RPS), establishing a goal that at least 33 percent of California's retail load be served by renewable energy by 2020. As a result of the RPS goal, CAISO anticipates that the number of small generator interconnection requests will remain high for at least the next several years.

5. In addition, CAISO states that because the SGIP utilizes a serial study process⁹ while the LGIP uses a cluster study process,¹⁰ there have been significant conflicts between the timelines for studying small and large generators. Under the SGIP's serial study process, each proposed generating facility is studied one at a time in succession, and the level of analysis to determine required transmission upgrades is performed for each individual generator. Each successive generation project is studied based on a transmission system that assumes the upgrades required by preceding projects are in place. Thus, according to CAISO, each project has its own separate timeline, and studies for a particular project cannot be undertaken until studies for previous electrically related projects are completed.¹¹

6. CAISO further states that as more projects enter the queue, a study backlog develops and becomes larger because all subsequent projects must wait for studies of all electrically related earlier projects to be completed. In combination with the discrete time periods provided for interconnection customers to make decisions regarding how and whether they wish to proceed in the interconnection process, CAISO states that simply

⁸ *Id.*

⁹ Under a serial study process, each individual interconnection request is studied separately in order to determine its effects on the transmission system. If projects that are higher in the interconnection queue drop out of the queue, CAISO argues it may become necessary to perform repeat studies, causing delay and additional costs to interconnect.

¹⁰ Under a cluster study process, a group of interconnection requests are studied jointly to determine their effects on the transmission system. As a result of clustering, CAISO argues that the need for repeating studies or dramatically changing the costs of interconnection are minimized.

¹¹ CAISO Transmittal Letter at 7.

devoting more resources to the study process will not relieve the backlog.¹² In addition, CAISO points out that projects withdrawing from the process can further exacerbate the delays, because they require restudy of all later projects, whose studies assumed that the transmission upgrades associated with the withdrawing project would be completed.

7. According to CAISO, a cluster study approach is more desirable when many projects require simultaneous study, because it raises the level of analysis of necessary transmission upgrades from the individual project level to the point of studying an entire group of electrically related projects at the same time.

8. CAISO states that the second major challenge that the GIP is intended to address is the differing timelines that currently exist under the SGIP and the LGIP. Under the LGIP, interconnection requests are placed into clusters, subdivided by location and undergo a two-phased study process.¹³ CAISO states that, while it recognizes that in certain respects it is appropriate to treat small and large generators differently,¹⁴ from a strictly electrical perspective, there is no practical difference between small and large generators. Because transmission upgrades are often lumpy in nature, a relatively small project can trigger the need for transmission upgrades. Therefore, according to CAISO, the interconnection studies must account for all generators interconnecting to a specific location on the grid.

9. According to CAISO, the timing differences, in conjunction with the large number of SGIP interconnection requests, necessitates consideration of the current process. If an SGIP interconnection request is electrically related to an interconnection request in an LGIP cluster, either CAISO must wait until the LGIP cluster study is completed before studying the SGIP interconnection request, or the SGIP interconnection request study must proceed based on potentially premature assumptions. CAISO states that waiting until the next LGIP cluster study is complete can cause significant delay in a small generator's study process, while proceeding with premature assumptions can result in significant increases in interconnection costs for a small generator. CAISO points out that the SGIP study process does not provide caps on an interconnection customer's financial responsibility, while the LGIP process does include such caps.¹⁵

¹² *Id.*

¹³ *Id.* at 8.

¹⁴ *Id.* citing Order No. 2006, FERC Stats. & Regs. ¶ 31,180.

¹⁵ *Id.* at 8-9.

10. According to CAISO, the combination of the large number of SGIP interconnection requests, along with the differences in study process and study timelines, has resulted in an unworkable backlog of interconnection requests under CAISO's SGIP. CAISO estimates that it would take as long as six to eight years from October 1, 2010 to complete the interconnection studies for all the projects currently in CAISO's queue under its SGIP.¹⁶ CAISO contends that a streamlined approach for small generators to interconnect will expedite the interconnection of renewable projects to meet California's RPS goals.

II. Generator Interconnection Process Proposal

11. CAISO states that the overarching purpose of the GIP proposal is to incorporate into Appendix Y of the CAISO tariff - which currently contains the LGIP - a set of interconnection rules applicable to both small and large generating facilities. CAISO asserts that combining and streamlining its interconnection process for small and large generators will result in the fairest and most efficient interconnection process for all generators. CAISO explains that its GIP proposal revises Appendix Y to provide for changes to the existing queue cluster study process, as well as the incorporation of two alternative study processes: the Independent Study Process (ISP) and the Fast Track Process.¹⁷ As described further below, CAISO's proposed GIP incorporates various modifications to the existing study timelines and study deposit and financial security requirements from those of its cluster study process under the current LGIP.

12. The merger of CAISO's SGIP and LGIP into the GIP was largely conducted by broadening the existing LGIP to include small generators.¹⁸ Thus, while the proposed GIP incorporates changes affecting both large and small generator interconnection customers, the most significant changes are those that impact small generator interconnection customers.

¹⁶ *Id.* at 5.

¹⁷ The ISP allows for expedited processing of those requests that are electrically independent of other requests in the ISO's interconnection queue. The Fast Track Process is an accelerated procedure that evaluates facilities no larger than 5 MW under the GIP proposal. *Id.* at 12.

¹⁸ CAISO merged the SGIP and LGIP to create the GIP. However, CAISO has retained a separate and less complex SGIA to benefit small generators at or below 20 MWs in size.

A. Interconnection Study Timeline

13. The GIP tariff amendment includes two primary modifications to the cluster study timelines in effect under the current LGIP. First, the GIP proposal would reduce the timelines for the Phase I and Phase II interconnection studies by a total of six months. The Phase I interconnection study process would be shortened from 180 days under the current LGIP to 134 days under the GIP. Likewise, the Phase II interconnection study process would be shortened from 330 days under the current LGIP to 196 days under the GIP.¹⁹

14. While the GIP study process is three months longer than the current SGIP, CAISO contends that this timing difference would be offset for small generators by the advantages of greater and earlier cost certainty, the elimination of delays due to restudies caused by project withdrawals, and more time after Phase I study results for a project to decide whether to continue with the interconnection process. CAISO also asserts that this potential difference in study timing between the SGIP and the proposed GIP is less meaningful because, due to the current volume of SGIP projects, the timelines under the SGIP have become impossible to meet, as evidenced by CAISO's estimate that it would take 6 to 8 years to complete study of the interconnection requests currently pending under the SGIP.

15. Second, CAISO proposes that, instead of having three discrete queue clusters and application windows with queue clusters subsequent to these three defined windows set forth in a Business Practice Manual, as is the case under the current LGIP, the GIP would establish two cluster application windows for each interconnection study cycle with fixed dates to provide customers more certainty. The first cluster application window would open on October 15 and close November 15 of the year prior to the year in which the interconnection studies would be performed. CAISO states that customers submitting interconnection requests in the first cluster application window would be able to receive a scoping meeting, but studies would not commence until after the second cluster application window, which would open on March 1 and close on March 31 of the study year. CAISO states that this feature was adopted at the request of stakeholders wanting additional feedback on their interconnection requests prior to the next queue cluster.²⁰

¹⁹ *Id.* at 24.

²⁰ *Id.* at 25.

B. Deposit-Related Modifications

16. CAISO proposes several modifications to requirements pertaining to interconnection study deposits under the GIP. First, the proposed GIP changes the initial interconnection study deposit from the flat \$250,000 fee currently in effect under LGIP to a deposit equal to \$50,000 plus \$1,000 per megawatt of electrical output of the generating facility, up to a maximum of \$250,000. CAISO asserts that this modification will provide an incentive to accurately identify the ultimate size of the generating facility from the outset, and thus will better align interconnection study costs and generating facility sizes.²¹ CAISO asserts that this modification is beneficial to small generators and that the new formula will result in study deposits from small generators that are less than the average cost of all necessary studies performed under the current SGIP.²²

17. The GIP proposal also modifies provisions of the LGIP governing refunds of interconnection study deposits for withdrawn projects. Under the current LGIP tariff, if an interconnection request is withdrawn during a specified timeframe, CAISO will refund the interconnection customer the difference between: (i) the interconnection customer's interconnection study deposit; and (ii) the greater of the costs CAISO and the participating transmission owner (PTO) have incurred on the interconnection customer's behalf or \$100,000, including interest.²³ Under the GIP amendment, however, CAISO states it will refund the interconnection customer the difference between: (i) the interconnection customer's interconnection study deposit; and (ii) the greater of the costs CAISO and the PTOs have incurred on the interconnection customer's behalf or one-half of the original interconnection study deposit up to a maximum of \$100,000, including interest. CAISO states that this tariff language is meant to reflect the changes mentioned above pertaining to study deposit amounts.

18. Finally, CAISO states that the current LGIP requires each interconnection customer to demonstrate site exclusivity or provide a site exclusivity deposit of \$250,000. CAISO, along with its stakeholders, asserts that this amount is too high for proposed small generating facilities. Therefore, the GIP proposal modifies these provisions to state that interconnection customers must demonstrate site exclusivity or, for interconnection requests in a queue cluster, must post a site exclusivity deposit of \$100,000 for a small generating facility or \$250,000 for a large generating facility. CAISO states that this

²¹ *Id.* at 27.

²² CAISO Transmittal Letter at 27. According to CAISO, the average cost of all interconnection studies for small generators under the SGIP has been over \$110,000.

²³ *Id.*

modification provides the appropriate balance between unreasonable financial strain and obtaining site exclusivity early in the interconnection process.

C. Interconnection Financial Security

19. CAISO asserts that small generators should be subject to financial security requirements to ensure that they have some “skin in the game.”²⁴ However, CAISO also states that the minimum financial security requirements small generators are exposed to should be reduced to avoid creating barriers to entry that could discourage small generators who lack the capital or financing resources of larger generators. Furthermore, CAISO states that all generators should be subject to a cap on their second posting of financial security, with small generators subject to a smaller cap than large generators. As a result, under the GIP proposal, small generators studied in a queue cluster or ISP (but not under the Fast Track Process) will be required to post interconnection financial security utilizing the same schedule as large generators, but under revised formulas for determining security for network upgrade costs, in order to reduce the financial burden on small generators.²⁵

20. CAISO states that the current provisions regarding initial posting of interconnection financial security in the LGIP will continue to apply to interconnection customers that have proposed large generating facilities in the interconnection queue. Under the GIP proposal, these provisions will extend to interconnection customers with large generating facilities in the ISP. Specifically, each such interconnection customer will be required to post an interconnection financial security instrument in an amount equal to the lesser of: (i) 15 percent of the total cost responsibility assigned to the interconnection customer in the final Phase I interconnection study or system impact study for network upgrades; (ii) \$20,000 per MW of electrical output of the large generating facility or the amount of MW increase in the generating capacity of each existing generating facility as listed by the interconnection customer in its interconnection request, including any requested modifications; or (iii) \$7,500,000, but in no event less than \$500,000. Furthermore, under the GIP proposal, small generating facilities will be subject to the same posting requirements applicable to large generating facilities, except that their minimum initial posting requirement is \$50,000.²⁶

²⁴ *Id.* at 28.

²⁵ *Id.* at 29.

²⁶ CAISO also notes that the \$7.5 million limit is removed for small generators with capacity of 20 MW or less because it would be impossible to reach that amount.

21. Similarly, the provisions in the LGIP regarding second postings of interconnection financial security will continue to apply to interconnection customers that have large generating facilities assigned to a queue cluster, as well as those that now apply under the ISP. Pursuant to the GIP proposal, each interconnection customer for a large generator will be required to post an interconnection financial security instrument in an amount equal to the lesser of: (i) \$15 million; or (ii) 30 percent of the total cost responsibility assigned to the interconnection customer for network upgrades in the final Phase I interconnection study, the final Phase II interconnection study, the system impact study, or the facilities study, whichever is lower. In no event will the total amount posted be less than \$500,000. Interconnection customers proposing small generating facilities that are assigned to a queue cluster or in the ISP will be required to make a second posting to increase the interconnection financial security to a dollar amount that is the lesser of: (i) \$1 million; or (ii) 30 percent of the total cost responsibility assigned to the interconnection customer for network upgrades in the final Phase I interconnection study, the final Phase II interconnection study, the system impact study, or the facilities study, whichever is lower. In no event will the total amount posted be less than \$100,000.

22. The GIP proposal also modifies the CAISO tariff to establish timelines for interconnection customers in the ISP to post their interconnection financial security instruments and to receive partial refunds of their interconnection financial security if they withdraw their interconnection requests or terminate their interconnection agreements. CAISO notes these timelines are shorter for interconnection customers in the ISP because of the overall expedited timeline for studying and interconnecting generators under the ISP in relation to the cluster study process.

23. The GIP proposal also adds a provision to CAISO's tariff that protects both small and large generator interconnection customers from having to post financial security in excess of the total amount of network upgrade costs. Specifically, under the GIP proposal, if the costs of the actual estimated network upgrades are less than the minimum posting amount, the required posting amount will be equal to the actual estimated network upgrade amount.

D. Transition of Existing SGIP Interconnection Requests to the GIP

24. CAISO proposes to split current SGIP requests into two groups. The SGIP serial study group will include customers with valid interconnection requests submitted prior to December 19, 2010, the requested effective date of the GIP, who have executed a system impact study or facilities study agreement providing for the completion of such studies by December 19, 2010. The second group, the SGIP transition cluster, will include customers with valid interconnection requests submitted prior to December 19, 2010 who have not executed a system impact study or facilities study agreement providing for the completion of such studies by December 19, 2010.

25. CAISO explains that it is limiting the groups in this way in order to: (i) limit the number of interconnection requests continuing under the SGIP; and (ii) give customers in the early stages of the process the best chance to achieve commercial operation at a date earlier than would be possible under the current serial process. Interconnection customers in the SGIP serial study group wishing to be studied as energy-only will continue to be processed per the procedures set forth in the SGIP (unless the customer specifically requests to be included in the SGIP transition cluster, or studied under the ISP). On the other hand, interconnection customers deemed to be included in the SGIP serial study group that wish to be studied as a full capacity deliverability status generating facility will continue to be processed per the procedures set forth in the SGIP for energy-only delivery status with a full capacity delivery status deliverability assessment to be performed as part of the next interconnection study cycle following completion of the serial portion of the generating facility's studies pursuant to Appendix S to the CAISO tariff.

26. CAISO states that it will attempt to study the SGIP serial study group prior to studying the SGIP transition cluster, but that, to the extent this approach is impracticable, it will study existing SGIP interconnection requests as expeditiously as possible using the most recent base case data. If CAISO is unable to complete studies for all SGIP serial study group projects prior to commencing study of the SGIP transition cluster, it will notify any projects it believes will not be completed before the SGIP transition cluster and allow them to join the SGIP transition cluster.

27. Interconnection requests to be studied as energy-only in the SGIP transition cluster will be processed and studied as a part of the Phase II Interconnection Study for CAISO's first and second queue clusters, which is scheduled to begin on January 1, 2011 and be completed on July 31, 2011. On the other hand, requests for full capacity deliverability status will be studied as energy-only as part of the Phase II Interconnection Study for CAISO's first and second queue clusters, with a full capacity deliverability assessment to be performed as part of CAISO's fourth queue cluster (scheduled to begin on June 1, 2011).

28. Interconnection customers in the SGIP transition cluster must post, within 30 days of the effective date of the GIP, all of the following: (i) an interconnection study deposit (in the amount set forth by section 3.5.1 of the GIP); and (ii) a demonstration of site exclusivity. CAISO states that any customer that does not satisfy these posting requirements will be removed from the SGIP transition cluster and will be refunded the entire amount of its interconnection study deposit less any amounts that CAISO and the PTOs have incurred in performing studies on the interconnection customer's behalf.

29. CAISO states that each interconnection customer remaining in the SGIP transition cluster at the conclusion of Phase II will receive a study report allocating its share of costs for interconnection facilities and reliability network upgrades. At that time, any

interconnection customer wishing to continue in the queue must execute an SGIA within 90 days of receiving the final report and must post the required interconnection financial security.

E. Enhanced Deliverability Study

30. CAISO proposes to modify the current deliverability study process for customers requesting full capacity deliverability status. First, CAISO will allow current interconnection customers that have or are being studied for energy-only service to apply to be switched to full capacity service during the cluster application window for the fourth queue cluster (starting March 1, 2011). As explained above, small generators that are a part of the serial study group may either elect to join the transition cluster group or else proceed serially and be studied for energy-only delivery status with a full capacity delivery status deliverability assessment to be performed as part of the next interconnection study cycle following completion of the serial portion of the generating facility's studies.

31. Next, CAISO proposes to create an annual deliverability study to allocate unused transmission system capacity to generators that request full capacity service on an "as-is" basis, i.e., without additional network upgrades. Customers must apply during the cluster application window for the fifth queue cluster (starting March 1, 2012). In order to qualify, a \$10,000 deposit is required. Once the study is concluded, capacity will be allocated with priority given to generators with the lowest transfer distribution factors on constrained elements, in order to maximize the amount of generation that can be brought on-line. If the full capacity of a generator is not deliverable, the request will be allocated partial capacity deliverability status rounded down to the nearest 50 MW. This prevents CAISO from having to continually decrement allocations as the load/generation distribution shifts over time. Finally, if CAISO must decrement capacity allocations, resource adequacy resources that request deliverability service through the annual studies will have their allocations reduced before resources that request full deliverability service through the standard interconnection study process. CAISO explains that it is proposing this approach because resources electing and receiving full capacity deliverability status through the standard interconnection study procedures are responsible for paying the costs of any upgrades necessary to obtain such deliverability, while resources obtaining deliverability through the annual full capacity deliverability option are being provided any remaining transmission capability on an "as is" basis for only the cost of the study.²⁷

²⁷ *Id.* at 35.

F. Independent Study Process

32. CAISO proposes to incorporate new provisions into the GIP that allow qualified, electrically isolated generators to be studied through an expedited serial process known as the ISP. CAISO states that the ISP, which is limited to energy-only interconnection requests, will improve the overall efficiency of the GIP process by exempting projects capable of being studied on their own from having to participate in the Phase I and Phase II interconnection studies for clustered projects, which have longer study timelines.

33. In order to qualify for this process, an energy-only interconnection customer must show that: (1) inclusion in the queue cluster cannot accommodate the desired in-service date of the generator; (2) the desired commercial in-service date is physically and commercially achievable;²⁸ and (3) the interconnection customer has obtained site exclusivity. In addition, interconnection customers must pass a series of power flow and short circuit tests to demonstrate that their generator is electrically isolated from other interconnection customers.

34. The power flow test provides that the interconnection request passes if: (i) the impact of the interconnection request on the electrically closest transmission facility affected by network upgrades required for cluster studies or earlier independent studies does not exceed 5 percent of the lesser of the interconnection request or the transmission facility capacity; and (ii) the sum of impacts of the interconnection request, and any earlier requests studied under the ISP, on the electrically closest transmission facility impacted by network upgrades required for cluster studies or earlier independent studies does not exceed 5 percent of the transmission facility capacity. If the request does not meet the second requirement, but its individual impact on the identified transmission facility is less than 1 percent of the facility's capacity, the request will still pass. Under the short circuit test, the interconnection request passes if the impact of the interconnection request on the electrically closest transmission facility affected by network upgrades required for cluster studies or earlier independent studies does not exceed 100 amps.

²⁸ The interconnection customer must demonstrate two of the following: (i) that it has obtained or has the ability to obtain all regulatory approvals and permits to complete construction by its requested commercial operation date; (ii) that it can provide, or attest that it has obtained, a purchase order for its equipment; or (iii) it can provide reasonable evidence of adequate financing or other financial resources to make required financial security postings.

G. Fast Track

35. The proposed GIP Fast Track process is a modified version of the existing SGIP Fast Track process that is intended to provide for an expedited process for interconnecting small generators to the CAISO grid. CAISO states that the GIP Fast Track proposal includes two primary changes to the current Fast Track process under the SGIP in order to make it more accessible to small generators. The first change to the SGIP Fast Track process is to increase the generator size permitted from 2 MW to 5 MW. CAISO explains that, to date, it has not received any interconnection requests under the SGIP Fast Track process. CAISO believes that increasing the size threshold would permit more small generators to qualify for the Fast Track process. In addition, CAISO states that, from an engineering standpoint, the increase from a 2 MW generating facility to a 5 MW generating facility is relatively small and would cause no greater an impact on the safety and reliability of the CAISO controlled grid.

36. The second change in the Fast Track process under the proposed GIP is the elimination of several technical screens from the current SGIP Fast Track process. Specifically, CAISO's proposed new GIP process no longer includes screens that require generators to meet the following specifications:

- The type of interconnection is to a primary distribution line;
- If the proposed small generating facility is to be interconnected on a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed small generating facility, cannot exceed 20 MW;
- If the proposed small generating facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, the addition will not create an imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer; and
- No construction of facilities by the PTO on its own system will be required to accommodate the small generating facility.

37. CAISO explains that it proposes to remove the first three criteria listed above because these screens do not apply to interconnections to the high voltage transmission system under CAISO's operational control and, thus, would never be applicable to an applicant under the GIP. In regard to the omission of the requirement that no construction of facilities by the PTO on its own system will be required to accommodate the small generating facility, CAISO states that this screen has been eliminated because it does not believe it is appropriate to restrict the Fast Track process simply because minor network modifications to the PTO's facilities may be required. Therefore, CAISO is proposing to amend the Fast Track process provisions to provide that if the proposed

interconnection passes the remaining screens and CAISO does not reasonably anticipate that upgrades are needed, the interconnection customer will have the opportunity to attend a customer options meeting.²⁹

38. In addition, there are other minor differences between the Fast Track process under the proposed GIP and the Fast Track process under the SGIP. First, the SGIP provides that the PTO will evaluate whether the proposed small generating facility that fails the screens may nevertheless be interconnected consistent with safety, reliability, and power quality standards, and just the PTO conducts any customer options meeting that may be required. Under the proposed GIP, both the PTO and CAISO will be involved in these activities. CAISO asserts that it is a critical participant in the evaluation and customer options meeting under the Fast Track process and the proposed GIP will simply reflect this fact.

39. Second, the proposed GIP Fast Track process clarifies that a demonstration of site control in the form of site exclusivity is required for an interconnection customer's proposed small generating facility whereas, the current SGIP Fast Track process requires the interconnection customer to demonstrate site control only. The CAISO states that the proposed GIP includes the site exclusivity requirement under the Fast Track process because site exclusivity (or a deposit in lieu of site exclusivity) is required for both small generating facilities and large generating facilities under the queue cluster process and the ISP set forth in the proposed GIP. Thus, CAISO contends that smaller sized generating facilities under the GIP Fast Track process should not be exempt from the site exclusivity requirement simply by virtue of their size.

40. Finally, the proposed GIP Fast Track process extends three timeframes that relate to the steps associated with ISO and PTO review of interconnection requests under the Fast Track procedures. The CAISO contends that these extensions are necessary due to its proposal to increase the threshold from 2 MW to 5 MW and the elimination of the screen relating to construction of PTO facilities may require more complicated and resource-intensive analysis by the CAISO and PTOs.

²⁹ The customer options meeting will include a review of possible interconnection customer facility modifications or the screen analysis and related results, to determine what further steps (i.e., supplemental review) are required to permit the proposed small generating facility to be safely and reliably connected.

III. Notice of Filing and Responsive Pleadings

41. Notice of CAISO's filing was published in the *Federal Register*, 75 Fed. Reg. 65,623, 66,075, with interventions, comments and protests due on or before November 9, 2010.

42. The Imperial Irrigation District, the Energy Producers and Users Coalition, NRG Companies, The Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, the City of Santa Clara, California and the M-S-R Public Power Agency, the Independent Energy Producers Association, the Northern California Power Agency, the California Department of Water Resources State Water Project, and the Modesto Irrigation District file motions to intervene.

43. Sempra Generation, Southern California Edison Company (SoCal Edison) and Pacific Gas & Electric Company (PG&E) filed motions to intervene and comments in support.

44. San Diego Gas & Electric Company (SDG&E), Acciona Solar Energy (Acciona), the Large-Scale Solar Association (Large-Scale Solar), the California Wind Energy Association (CalWEA), and Wellhead Electric Company (Wellhead) filed motions to intervene and comments. Full Circle Renewables, LLC (Full Circle) filed a motion to intervene out of time and comments.

45. The Interstate Renewable Energy Council, the California Solar Energy Industries Association and the Vote Solar Initiative (Joint Solar Parties) and the Feed-In Tariff Coalition (FIT) filed motions to intervene and protests.

46. The California Public Utilities Commission (CPUC) filed a notice of intervention and comments. SoCal Edison, PG&E, and SDG&E filed a joint answer. CAISO filed an answer.

IV. Discussion

A. Procedural Matters

47. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2010), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2010), the Commission will grant Full Circle's late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

48. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2010), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept CAISO's answer because it provided information that assisted us in our decision-making process. We will reject SoCal Edison, PG&E, and SDG&E's joint answer because it responds to matters which, as discussed further below, are outside the scope of this proceeding.

B. Comments and Protests

1. General GIP

49. Commenters all acknowledge the need to reform CAISO's current process for generator interconnection in light of the significant delays and backlogs that have developed in its SGIP. Supporters of the proposal contend that moving toward a cluster approach for processing electrically related interconnection requests will address many of the efficiency and timing issues that exist under the current SGIP. SoCal Edison argues that these reforms are absolutely necessary to resolve the ongoing queue delays, solve the interdependency issues, and meet California's renewable energy goals.³⁰ Wellhead further asserts that the enhanced full capacity deliverability options available to generators of all sizes under the GIP will benefit small generators by offering them the flexibility to obtain full capacity status in a manner comparable with the full capacity projects under the current LGIP.³¹ Several parties, however, contend that adjustments need to be made to CAISO's GIP proposal to make it more palatable for small generators.

50. FIT, the CPUC, and the Joint Solar Parties are particularly concerned that an unmodified CAISO GIP could be adopted by the California Investor Owned Utilities (IOU) in their wholesale distribution access tariffs (WDATs), which apply to distribution-level interconnection procedures. They contend that this would put small generators that can interconnect to existing infrastructure and come on-line quickly at a significant disadvantage because the proposed GIP provides them the opportunity to request interconnection only once per year.

51. FIT contends that CAISO has failed to justify that its proposal is the best available solution for improving its interconnection process. FIT states that a combination of other approaches by CAISO, such as hiring additional staff, modernizing and streamlining software, and providing more public information so that interested interconnection customers could opt to hire third-party consultants to conduct independent

³⁰ SoCal Edison Comments at 10.

³¹ Wellhead Comments at 3-4.

interconnection studies, could help address the current backlog under SGIP. FIT asserts that with these measures, CAISO could reduce the entire cluster study process from the proposed 420 days to just six months.³²

52. In its answer, CAISO addresses FIT's assertions that CAISO should consider alternate streamlining options in place of the GIP proposal. First, CAISO states that it has already adopted in its LGIP (and proposes to retain in the GIP) the Order No. 2003 streamlining recommendations of combining feasibility and system impact studies, performing system impact studies on a clustered basis, and utilizing third-party consultants for performing generator interconnection studies.

53. CAISO also claims that it has, and will continue to, utilize additional personnel if doing so will increase efficiency. However, CAISO asserts that, due to the serial nature of the studies under the current SGIP and the fact that the studies are comprised of numerous individual tasks that cannot be completed in parallel, adding more staff would not speed up the process of completing the backlogged SGIP studies. Second, CAISO claims that it already employs custom-made, state-of-the-art software in its interconnection process. CAISO contends that this modeling software is of sufficient quality and does not need to be streamlined.

54. The Joint Solar Parties contend that Order No. 2006 determined that separate, faster treatment was warranted for small generator interconnection requests because they pose reduced potential for significant impacts on transmission or distribution systems.³³ They further assert that the Commission has consistently held that small generators do not have non-discriminatory access to competitive markets. They argue that the GIP proposal potentially undermines Order No. 2006 protections against discrimination by requiring smaller generators to face the same costs and time frames to interconnect as large generators.³⁴

55. The Joint Solar Parties point out that small generators that do not meet the criteria for the Fast Track or ISP processes will have to go through a full cluster study under CAISO's proposed GIP, regardless of their size. The Joint Solar Parties assert that the stakeholder process that led to CAISO's proposed GIP did not sufficiently consider whether the fees or up front deposits facing a small generator that cannot proceed under

³² FIT Protest at 4.

³³ Joint Solar Parties Protest at 8, citing *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,191, at P 17 (2009).

³⁴ *Id.* at 7-9.

Fast Track are consistent with Order No. 2006.³⁵ Under CAISO's proposal, a small generator that cannot proceed on Fast Track must proceed to either the cluster study or the ISP process, which include a one-time study deposit of \$50,000 plus \$1,000 per MW of capacity. The Joint Solar Parties point out that, while a small generator proceeding under SGIP's serial process may ultimately face similar costs, the up-front nature of the proposed CAISO deposit for the ISP and cluster study deposits could serve as a serious deterrent to small generators. In contrast, they claim that the current SGIP process provides small generators more breakpoints in the process to assess whether a project is going to be too expensive.

56. The Joint Solar Parties contend that consistency in standardized interconnection procedures provide significant benefits, including increased safety, efficiency and cost-effectiveness. They assert that if the number of standards or processes is increased in any given region or market, the potential for error increases and these benefits are lost. The Joint Solar Parties argue that CAISO's GIP proposal exacerbates an existing situation where a given project developer may face a dizzying array of different processes depending on where it chooses to interconnect. For example, a 2 MW generator interconnecting in California could potentially interconnect under a CAISO fast track, ISP, or cluster study process; an IOU fast track, ISP, cluster study, or serial study process; or a CPUC simplified interconnection or study process.

57. Which track a developer will face depends on numerous factors that the Joint Solar Parties contend have no relevance to whether a proposed interconnection is likely to have significant impacts on a transmission or distribution system. Despite the lack of relevance to grid impacts, these factors dictate the time and expense involved in completing an interconnection. The Joint Solar Parties believe the technical standards for interconnection should be consistent across utilities to better promote safety, efficiency and cost-effectiveness in interconnecting generators. They argue that approval of the GIP would further erode standardization of interconnection in California and thus the GIP should not be fully approved until there is a more robust process in place for deliberating the impacts of proposed modifications.³⁶

58. CAISO answers that, contrary to the assertions of Joint Solar Parties, the only new interconnection process included in the GIP is the Independent Study Process, which CAISO notes was added at the request of stakeholders. CAISO argues that, though it doesn't believe the introduction of this one additional study process creates any undue

³⁵ *Id.* at 9

³⁶ *Id.* at 10-11.

confusion, if an interconnection customer were to believe it faced too many choices in the CAISO interconnection process, it could simply elect the default cluster process. CAISO asserts that there is no merit to Joint Solar Parties' suggestion that providing more flexibility to customers so that the interconnection study process better meets their particular needs is contrary to the Commission's interconnection standardization policy.

59. California has numerous wholesale programs underway that the Joint Solar Parties contend could be severely affected by the CAISO proposal to alter the SGIP process. They argue that, while CAISO identifies California's aggressive RPS as a reason for the backlog of interconnection applications, its stakeholder process did not fully consider the many procurement programs that the GIP proposal could undermine.

60. For example, the Joint Solar Parties cite CPUC's recent Proposed Decision (PD) adopting a Renewable Auction Mechanism (RAM). If adopted, the Joint Solar Parties state that this program will require the IOUs to procure 1,000 MW of renewable generation from distributed generation resources having less than 20 MW in capacity. They contend that RAM PD requires projects to achieve commercial operation within 18 months of contract execution, with one or more six-month extensions possible but only at the discretion of an IOU.³⁷ The Joint Solar Parties state that, among other things, the RAM would require that bidders have site control and have filed an interconnection application before they bid into the RAM, which means that the bidder will have to commit a significant amount of capital before a bid is accepted. The Joint Solar Parties assert that the risk of having a contract cancelled for not meeting the 18-month deadline due to delays in the interconnection process or other factors could exclude many companies from participation.

61. The Joint Solar Parties also point out that the CPUC has recently approved solar photovoltaic (PV) programs for the major IOUs, each with significant procurement targets. Similar to the RAM, the Joint Solar Parties contend that these programs require 18-month project operation dates that could be difficult to achieve if the interconnection process cannot accommodate the tight time frame. The Joint Solar Parties contend that this is particularly true for PG&E's program, which is focused on ground-mounted systems up to 20 MW in capacity. They argue that many of the participating projects would be ineligible for either the Fast Track or ISP processes and, thus, would be required to use the cluster study process. They assert that this would expose generators

³⁷ *Id.* at 12, citing *Proposed Decision of ALJ Mattson Adopting the Renewable Auction Mechanism*, Rulemaking 08-08-009, Before the Public Utilities Commission of the State of California, at 17 (August 21, 2008). Available at: <http://docs.cpuc.ca.gov/efile/PD/122407.pdf>.

as small as 3 MW to excessive interconnection costs and potential contract failure if the interconnection process is not completed in 18 months. Thus, they conclude that CAISO's proposal may stifle the very programs it is intending to accommodate.³⁸

62. The Joint Solar Parties claim that other potentially affected California programs include the recently expanded AB 1969/SB 32 feed-in-tariff program. According to the Joint Solar Parties, under the SB 32 feed-in-tariff, utilities are required by state law to provide "expedited" procedures for interconnections to the distribution system for peak generation technologies when the utility determines that "the electric generation facility will not adversely affect the distribution grid."³⁹ The Joint Solar Parties conclude that it will be difficult to maintain consistency with state law if generators must interconnect under the procedures being proposed by CAISO. They assert that CAISO should gear its efforts toward accommodating the programs being implemented in California.

63. The Joint Solar Parties assert that CAISO's five-month stakeholder process provided very limited opportunities for participants to give substantive input and failed to seek meaningful participation by groups familiar with the realities facing small generators or the practical implications of the reforms on California's various wholesale renewable procurement programs. In contrast, they point out that the development of the Commission's *pro forma* SGIP and LGIP involved four years of process, with stakeholders of all shapes and sizes directly developing the initial working group standards that became part of the final rules.⁴⁰

64. The Joint Solar Parties conclude that the GIP as currently proposed fails to meet the standard of review established by the Commission for tariff amendments to its *pro forma* SGIP.⁴¹ They state that the independent entity standard requires that the proposed modifications be just and reasonable and not unduly discriminatory, and that they still accomplish the purpose of the underlying order being modified. They argue that the GIP proposal places an undue burden on small generators by failing to adequately consider the impacts of the GIP process on them and the impacts on California's wholesale distributed generation programs.⁴²

³⁸ Joint Solar Parties Protest at 13.

³⁹ *Id.* at 14, *citing* Cal. Pub. Util. Code § 399.20(e).

⁴⁰ Joint Solar Parties Protest at 14.

⁴¹ *Id.* at 8 (citations omitted).

⁴² *Id.* at 8 and 15.

65. The Joint Solar Parties believe the logical place to refine these issues and develop a record that all parties can support is through further collaborative efforts at CAISO. Accordingly, the Joint Solar Parties request that the Commission conditionally approve the GIP subject to further efforts to refine the GIP as it relates to small generators.⁴³

Commission Determination

66. As discussed further below, we accept as just and reasonable, subject to condition, CAISO's proposed tariff revisions establishing a combined GIP cluster study process with two alternative study processes for generators seeking to interconnect with the CAISO transmission grid. We find that CAISO's GIP proposal strikes an appropriate balance between preserving the interests of small and large generator interconnection customers while ensuring that other viable options are available to process interconnection requests as quickly as possible. Commenters generally agree that CAISO's current SGIP serial process is not functioning as it was designed and that reforms are need to address the backlog of small generator interconnection requests that has developed.

67. CAISO's proposal harmonizes its existing SGIP and LGIP processes by establishing a standardized approach for studying generators seeking interconnection to CAISO's transmission system. Due in large part to the State of California's 33 percent RPS target, there has been a significant increase in the number of small generators seeking interconnection over the past three years. The influx of 130 interconnection requests in the past year alone, further exacerbated by inefficiencies and timing conflicts arising between CAISO's separate SGIP and LGIP processes, has created a backlog of requests that CAISO estimates would take six to eight years to clear.⁴⁴

68. Under CAISO's current SGIP serial study approach, interconnection requests are studied one at a time and each subsequent request cannot be studied until studies for all electrically related projects ahead of it have been completed. Furthermore, because network upgrades are evaluated at the individual project level, any electrically related project that drops out of the queue triggers the need to restudy projects further back in the queue as the withdrawal changes the assumptions upon which subsequent studies are based.

69. The problem is further complicated by the lumpy nature of transmission upgrades as this relates to CAISO's current experience in which there are a large number of small

⁴³ Joint Solar Parties Protest at 17.

⁴⁴ Ruddy Testimony at 7.

generators trying to interconnect at the same time. In this circumstance, any project, regardless of size, can trigger the need for transmission upgrades. This means that it is reasonable for CAISO to take into account all generators, small and large, seeking to interconnect in a particular area of the grid. Currently, the separate timeline for studying serial SGIP requests means that CAISO must decide whether to proceed with a base case that represents incomplete information about electrically related projects in the most recent LGIP cluster or else hold an individual small generator request until after the LGIP cluster study is complete. While this approach may suffice under normal circumstances, it is ill-suited to the unusual situation CAISO currently faces as described above. Moreover, while protestors note that CAISO's proposed GIP would extend the existing SGIP study timeline for small generators by approximately 3 months, it has become clear that, in practice, the SGIP study timeline is unrealistic and inaccurate.

70. We find that CAISO's proposal to study electrically related projects simultaneously under an integrated set of generation interconnection procedures appropriately addresses the root causes of the current backlog of small generator interconnection requests. First, the GIP cluster study mechanism recognizes the numerous benefits of utilizing a cluster approach to study related projects together, thus improving efficiency and decreasing the frequent need for restudies under the serial approach.⁴⁵ We also find that this approach may have the affect of reducing the interconnection costs associated with the need for restudies from project withdrawals. Second, by establishing a shared timeline and grouping related projects of all sizes together, the current disconnect between the SGIP and LGIP study timelines will be eliminated and small projects will no longer be faced with the unfavorable prospects of inaccurate cost estimates or being forced to wait until after the next LGIP cluster study to proceed. CAISO's combined cluster study approach also should mitigate any incentive developers may have to break larger projects into multiple smaller requests in an attempt to pass through the SGIP, thus further improving the efficiency of the combined GIP mechanism.

71. In response to FIT's argument that CAISO has failed to demonstrate that the GIP represents the best solution to the problems at hand, CAISO is not required to demonstrate, and we are not required to find, that the proposal at hand is the only or even the best approach. Rather, we are required to review the proposal under the independent entity variation standard to ensure CAISO adopts just and reasonable rates, terms and

⁴⁵ See Order No. 2006, FERC Stats. & Regs. ¶ 31,180 at P 181, *see also* Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 155; *see also Interconnection Queuing Practices*, 122 FERC ¶ 61,252, at P 10 (2008).

conditions.⁴⁶ The Commission's review is complete if we determine that the proposal filed by the CAISO is just and reasonable and not unduly discriminatory or preferential.⁴⁷ Nonetheless, the new combined cluster approach could open up the possibility for further benefits from additional measures and we encourage CAISO to consider how it may further improve the efficiency of its process in the future.⁴⁸ As discussed below, because we share FIT's interest in seeing how the Fast Track and ISP mechanisms develop as they are integrated into the new GIP, we will require CAISO to incorporate an informational update on these two processes as a part of CAISO's existing LGIP quarterly reports.

72. The Joint Solar Parties argue that the GIP proposal undermines Order No. 2006 protections against discrimination by requiring smaller generators to face the same costs and time frames to interconnect as large generators. Order No. 2006 articulated that maintaining small generator interconnection standards was meant to: (i) limit opportunities for transmitting utilities to favor their own generation; (ii) remove unfair impediments to market entry for small generators by reducing interconnection costs and time; and (iii) encourage investment in generation and transmission infrastructure, where needed.⁴⁹

73. On the first point, because CAISO is an independent entity with no generation of its own, it does not have an incentive to unduly discriminate against small generators. The Commission has previously recognized this special nature of ISOs and RTOs by providing them the opportunity to seek an independent entity variation.⁵⁰ This standard

⁴⁶ 16 U.S.C. § 824d (2006).

⁴⁷ *Cal. Indep. Sys. Operator Corp.*, 121 FERC ¶ 61,193, at P 106 (2007), (citing *Louisville Gas and Elec. Co.*, 114 FERC ¶ 61,282, at P 29 (2006) (the just and reasonable standard under the FPA is not so rigid as to limit rates to a "best rate" or "most efficient rate" standard; rather, a range of alternative approaches often may be just and reasonable), *reh'g denied*, *E. ON U.S. LLC*, 116 FERC ¶ 61,020 (2006)).

⁴⁸ We note that in its answer, CAISO confirmed its commitment to conducting a further stakeholder process during 2011.

⁴⁹ See Order No. 2006, FERC Stats. & Regs. ¶ 31,180 at P 8, *see also* Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 10.

⁵⁰ An RTO or ISO proposing a variation must demonstrate that the variation is just and reasonable and not unduly discriminatory, and would accomplish the purposes of Order No. 2003. See, e.g., *PJM Interconnection, L.L.C.*, 108 FERC ¶ 61,025, at P 7 (2004) ("[W]hen an RTO is the filing entity, the Commission will review the proposed

(continued...)

of review allows more flexibility than is otherwise provided under the “consistent with or superior to” standard that applies to non-independent entities.⁵¹ We find that approval of the proposal under the independent entity variation standard is appropriate here given that CAISO is an independent entity seeking to improve the process through which it provides open access to its transmission system in an efficient and cost effective manner to generators requesting interconnection.

74. Furthermore, we find that the GIP proposal will meet the second and third goals enumerated in Order No. 2006. The new GIP cluster approach will reduce the initial costs of network upgrades to small generators who will now pay just their pro rata share of necessary upgrades instead of being subject potentially to the up-front funding of the full cost of upgrades they would have been subject to under the SGIP. Many small generators could also see significant time-savings, as participating in the new cluster study process would alleviate the time consuming delays caused by the disconnect with the LGIP and the need for restudies. Finally, the GIP proposal will encourage investment in generation and transmission infrastructure where it is needed by encouraging the right-sizing of projects and discouraging speculative interconnection requests.

75. In addition, we find that CAISO’s proposal does support the unique concerns of small generators, contrary to the Joint Solar Parties’ arguments, by expanding the availability of two alternative study processes: (i) the modified Fast Track process; and (ii) the new ISP. The addition of these options will ensure that truly small and/or electrically independent projects that meet minimum criteria have the opportunity to be studied on a very expedited schedule. These alternatives, combined with the benefits of increased up-front cost certainty, fairer allocation of network upgrade costs to electrically related projects based on project size, and average study costs lower than those under the SGIP provide clear benefits for small generators. The Commission finds that these additional features of the GIP proposal will help CAISO achieve the goals of Order No. 2003 and Order No. 2006 and, thus, finds that the GIP proposal is just and reasonable, and not unduly discriminatory or preferential.

76. The Joint Solar Parties contend that the study deposits required under the GIP may present new challenges to small generators by requiring them to make a significant up-front investment when requesting an interconnection study. While the initial study

variations to ensure that they do not provide an unwarranted opportunity for undue discrimination or produce an interconnection process that is unjust and unreasonable.”), *order denying reh’g*, 110 FERC ¶ 61,099 (2005).

⁵¹ See Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 26, 827.

deposit required under the GIP may be higher for some generators than they would have faced under the SGIP, the average total study costs for small generators will be lower.⁵² Furthermore, tying the size of the initial deposit to the size of the project encourages developers to right-size their investments. Finally, the GIP proposal provides small generators a significant benefit in the form of increased cost certainty earlier in the process. Under the GIP, truly viable, non-speculative projects are more likely to stay in the queue and benefit from earlier cost certainty than they would under the current SGIP.

77. Contrary to the Joint Solar Parties' assertions, we find that CAISO's GIP proposal would improve, rather than undermine, the consistency of interconnection procedures in California. The purpose of the GIP is to improve efficiency by establishing a cohesive approach to interconnection with CAISO's grid while acknowledging the unique concerns of small generators. In response to their concerns that the technical screens for the alternative study processes should be standardized across utilities, we find that the Fast Track and ISP processes exist to allow projects that are ready to be studied and would have minimal impact on the transmission grid to proceed more quickly through an independent study approach. It is logical that the technical criteria for which projects can proceed through these alternative processes with minimal impact on the grid should be tailored to the current challenges CAISO is facing in trying to interconnect large numbers of generators to its transmission system.

78. Multiple parties raise concerns that CAISO's GIP proposal could have adverse consequences if adopted by the California IOUs in their WDATs. This order, however, narrowly addresses CAISO's proposal for interconnection procedures for its transmission system and, thus, the IOUs' WDATs are not before the Commission at this time. Therefore, any concerns with the California IOUs' WDATs are outside the scope of this proceeding. Our acceptance of the GIP proposal recognizes the special accommodations we afford independent entities under our interconnection policies, for the reasons summarized above. Any utility proposing to utilize an approach that mirrors the GIP will have to justify its consistency with Order No. 2003 and Order No. 2006 and Commission

⁵² The current average study costs for small generators under the SGIP are \$110,000. Under the GIP proposal, the maximum study deposit a small generator would face is \$70,000. Small generators will also benefit from having their network upgrade costs capped based on the study results, whereas no such cap exists under SGIP. Large generators would also be no worse off under the GIP because it places a study deposit cap of \$250,000 that is equal to the current study deposit under the LGIP. Indeed, all large generators under 200 MWs in size will see their total study deposit costs decrease under the GIP.

precedent under the relevant standard, and it will not enjoy an independent entity variation accommodation.

79. Furthermore, we find that the Joint Solar Parties' arguments that the GIP would undermine the State of California's RAM PD, solar PV, and SB 32 FIT programs are premised on the assumption that the GIP will in fact slow down the speed at which small generators proceed through the interconnection study process. The preponderance of the evidence in the record indicates that the opposite is likely to be true. The GIP will allow electrically related projects to be studied together, thus significantly decreasing the probability that projects will need to be restudied multiple times. The GIP will also eliminate the incentive for larger projects to split up in order to qualify for the SGIP serial approach, thus further improving the efficiency of the study process. CAISO has also added a new ISP mechanism and expanded the existing Fast Track process aimed at expediting the interconnection process for small generators. We also note that CAISO is not, through its GIP proposal, attempting to design a process for interconnecting generators to a *utility distribution system*. As such, Joint Solar Parties' arguments on this issue would appear to be more applicable to interconnection requests under a WDAT, rather than CAISO's GIP.

80. We disagree with the Joint Solar Parties that CAISO's stakeholder process was too short and failed to provide stakeholders meaningful opportunities to participate. CAISO has spent five months working with stakeholders to develop a proposal that promotes expedient and reliable interconnection with the transmission system while preserving the interests of small generators. Indeed, the process has been robust and has given a broad range of stakeholders opportunities to contribute feedback. In April 2010, CAISO initiated the five-month stakeholder process that led to this GIP tariff amendment. CAISO held five meetings and conference calls with stakeholders to discuss the issues and implementation details regarding the GIP proposal. CAISO also produced several written proposals for stakeholder review during this process, including an issues paper on April 14, a straw proposal on May 27, a draft final proposal on July 20, and an addendum to that final proposal on August 13. Further, CAISO solicited written comments and suggested edits to the draft tariff language from stakeholders, which it used to formulate its final proposal. In fact, several commenters have provided positive feedback on the stakeholder process, citing its thoroughness.⁵³ While the Commission's standards for interconnection procedures may have developed over a longer period of time, the rapid increase in interconnection requests in California and the growing backlog for serial studies lead us to conclude that delaying reform for several years does not make sense

⁵³ CalWEA Comments at 4, Large-Scale Solar Comments at 2, PG&E Comments at 3, Wellhead Comments at 2.

here. Moreover, CAISO was not creating a new interconnection process largely from scratch; rather, it was merely proposing revisions to existing processes.

81. Finally, no protests or comments were filed in this matter regarding the potential impact of CAISO's proposed tariff revisions on interconnection customers that would formerly have requested interconnection under CAISO's LGIP. While this order describes various changes affecting large generators, changes affecting large generation interconnection customers are accepted as filed.

2. Timeline

82. The Joint Solar Parties would like to see further consideration, through an additional stakeholder process with CAISO and its PTOs, of the use of an additional cluster window. CAISO's draft proposal contained an option for small generators to shorten the cluster study process by moving directly into the Phase II study stage. Although Joint Solar Parties appear to support this feature, they believe it needs more refinement to ensure that it would be accessible to more developers. Joint Solar Parties argue, therefore, that this feature should be further reconsidered and refined.

83. Large-Scale Solar and CalWEA assert that CAISO should modify the language in section 3.5.1.5 to recognize that, given the current 8-year estimates for some LGIP transition cluster transmission upgrades, requiring a commercial operation date that is no more than seven years out from the initial request for interconnection may not be feasible for some projects.⁵⁴

Commission Determination

84. We encourage CAISO to continue to work with stakeholders to create solutions that will allow generators to proceed through the cluster study process as quickly as possible. While we find that the current GIP proposal adequately balances the interests of small generators with the need to reform the flawed SGIP serial process, the Joint Solar Parties' suggestions of adding an additional cluster window or shortening the cluster study process for small generators merits further consideration as CAISO works with market participants to consider possible future enhancements to the GIP process.

85. Large-Scale Solar expresses concerns that the requirement in section 3.5.1.5 that a project's commercial operation date be no more than seven years from the date of the initial interconnection request is untenable because some LGIP transition cluster

⁵⁴ CalWEA Comments, Attachment A at 1, Large-Scale Solar Comments, Attachment A at 1.

transmission upgrades are projected to take eight years to complete. Our reading of section 3.5.1.5 is that it provides the interconnection customer the flexibility to request an exception to the 7-year requirement if the interconnection customer can demonstrate the need for a later commercial operation date. Thus, we find that further modification to the tariff is unnecessary at this time.

3. Independent Study Process

86. Wellhead, CalWEA, and FIT contend that the ISP process is overly restrictive and needs to be modified to make it a more viable alternative for small generators. Wellhead argues that CAISO should be allowed flexibility to exercise good engineering judgment in making the determination of eligibility for the ISP and that the energy-only status for ISP projects should only be for those time periods when full delivery from the ISP project is not possible without the identified upgrade(s).⁵⁵

87. CalWEA claims that the flow impact test fails to define specific criteria for determining electrical independence and the short circuit test is unnecessary because any overlap in network upgrades that would be identified by this test would be trivial. Therefore, CalWEA suggests that CAISO should remove the electrical independence criteria from the ISP in favor of more objective criteria developed through a stakeholder process. Large-Scale Solar contends that, if the Commission retains the short circuit test, it should be modified to recognize short-circuit software limits by raising the threshold to reflect the precision level that individual PTOs' modeling tools can support. FIT also questions whether the stringent electrical independence requirement, combined with the lack of up-front transmission analysis early in the development cycle, might prevent many small generators from viably utilizing the ISP.⁵⁶

88. Wellhead recommends that the Commission require CAISO to modify its GIP to make it clear that: (i) the ISP proposed criteria are informative but not necessarily definitive; (ii) CAISO is to exercise good engineering judgment in making the determination of eligibility for the ISP; and (iii) the energy-only status for ISP projects should only be for those time periods when full delivery from the ISP project is not possible without the identified upgrade(s).⁵⁷

⁵⁵ Wellhead Comments at 4-6.

⁵⁶ FIT Protest at 5.

⁵⁷ Wellhead Comments at 6-7.

89. The Joint Solar Parties argue that the ISP should be expanded and the ISP eligibility criteria should be clarified. Specifically, they contend that the concepts of “electrical independence” and a “legitimate commercial need to be studied independently,” that are set forth in CAISO’s ISP proposal need to be further developed. While electrical independence has traditionally been a subjective test, CAISO states that it developed an objective test because “such determinations are not always clear, particularly where large projects are involved.”⁵⁸ The Joint Solar Parties assert that the stakeholder process should determine whether a separate set of criteria for electrical independence is appropriate for smaller generators, given that the complexity in such determinations, admittedly, comes with larger projects.

90. On the issue of establishing a “legitimate commercial need,” the Joint Solar Parties are concerned that the burden of proof for a developer to show a legitimate deadline could be untenable in light of how some of California’s wholesale procurement programs are designed. For example, if a wholesale program requires a developer to show that it has cleared technical screens or reached an interconnection landmark before that developer can even bid to participate in a program, then the requirement that an applicant demonstrate a commercial deadline in order to proceed under ISP creates a “chicken or egg” dilemma.⁵⁹ The Joint Solar Parties contend that further stakeholder process could clarify how to avoid this problem.

91. FIT claims that it is still unclear what the net impact will be from electrical independence test of the ISP process for two reasons. FIT contends that, while CAISO’s witness Mr. Sparks provides an analysis of 32 small projects in the CAISO queue and concludes that 25 percent of these would pass the electrical independence tests, he doesn’t explain how these 32 projects were selected. Second, FIT asserts that CAISO has presented no analysis of which lines on its system are likely to be needed to support a particular quantity of MWs at particular interconnection points. FIT points out that this kind of analysis was completed by PG&E as part of its 1-20 megawatt solar PV solicitation and by SoCal Edison for their similar program.⁶⁰

92. FIT argues that CAISO should provide far more information about the net impacts of these tests on availability of the ISP before the Commission approves the GIP proposal. Therefore, FIT requests that the Commission require CAISO to do the following:

⁵⁸ Joint Solar Parties Protest at 16, *citing* CAISO Transmission Letter at 16-17.

⁵⁹ *Id.* at 17.

⁶⁰ FIT Protest at 11.

1. Make interconnection data available in Google Maps and Google Earth (in kmz format);
2. Identify and color code substations for existing capacity for 20 MW and smaller projects. Identified substations should be “clickable” in order to provide interconnection information.
3. In the event that a substation has more than one transformer, load on each transformer should be provided in addition to aggregated information for the substation as a whole.⁶¹

Commission Determination

93. As discussed below, we find that the new proposed ISP mechanism provides a valuable expedited serial study approach for generators that can be studied and approved for interconnection independent of CAISO’s other processes. CAISO proposes to create an ISP mechanism that would allow electrically independent generators that would otherwise be unable to meet their commercial operation date the opportunity to be studied through an alternative, expedited, serial interconnection process. In order to qualify to be studied under the ISP, generators must first demonstrate a commercial need to be studied independently. This is necessary to ensure that CAISO will be able to meet the expedited timeline set forth in the ISP to serve interconnection customers that are most vulnerable to study delays. Second, generators are required to pass two objective tests, the flow impact test and the short circuit test, to determine whether they are electrically independent from other projects being studied in CAISO’s interconnection queue.

94. Protestors question various aspects of the flow impact and short circuit tests, some asserting that the tests are too subjective and others claiming that the tests should be considered merely informative in order to allow CAISO flexibility to use “good engineering judgment” in assessing electrical independence. We find that CAISO’s proposed tests for electrical independence represent a just and reasonable compromise between these opposite perspectives. In order to ensure that the process for determining eligibility for the ISP is transparent and non-discriminatory, it is appropriate for CAISO to establish basic objective criteria.

95. Furthermore, we disagree with the Joint Solar Parties’ contention that the terms “electrical independence” and “legitimate commercial need to be studied independently,” are unclear. CAISO has explained that commercial need would be demonstrated via a showing that inclusion in the queue cluster would prevent a generator from achieving its

⁶¹ *Id.* at 12.

commercial operation date.⁶² CAISO also explained its multi-stage flow impact test, which demonstrates meaningful flexibility by taking into consideration both aggregate and incremental power flow impacts to determine whether or not a generator passes.⁶³ We also disagree with CalWEA's claim that the short circuit test is unnecessary. Regardless of the probability that an overlap of network upgrades would be identified by this test, it is reasonable, in order to ensure reliability, for CAISO to assess the potential impact of an interconnection request on the impacted transmission facility.

96. We disagree with Wellhead that CAISO should only limit ISP projects to energy-only requests for those time periods when full delivery from the ISP project is not possible without the identified upgrades. While full capacity deliverability status may provide interconnecting generators additional benefits, we find that the GIP proposal will actually significantly expand the availability of this level of service by offering the option of having a deliverability assessment performed for generators of all sizes entering the queue cluster study process. Because deliverability assessments require a much more comprehensive study of the interconnection customer's impact on the transmission system, it is more efficient for these studies to be undertaken in conjunction with other generators seeking interconnection concurrently. Furthermore, appropriately including projects seeking this additional level of service in the cluster study process should help preserve the expediency of the serial ISP mechanism for interconnection customers seeking energy-only status.

97. We share FIT's interest in seeing how the ISP mechanism develops as it is integrated into the new GIP. Thus, while we decline to require CAISO to compile and make available the extensive data FIT suggests above, we will require CAISO to incorporate an informational update on the ISP mechanism as a part of its existing LGIP quarterly reports.⁶⁴ In particular, CAISO should include information about the number of projects requesting interconnection through the ISP, the outcome of those requests, the complete length of time for recently completed ISP interconnection studies (from initial application through final approval), and the reason for any rejections of projects requesting ISP treatment. This information will improve the transparency of the ISP, which is in the best interest of all market participants.

⁶² Rutty Testimony at 18-19.

⁶³ Sparks Testimony at 6-9.

⁶⁴ *Cal. Indep. Sys. Operator Corp.*, 124 FERC ¶ 61,292, at P 200 (2008).

98. Finally, we agree with parties that the best approach for addressing areas in need of refinement is through further stakeholder discussion. Thus, we will hold CAISO to its commitment to continue working with its customers to address these concerns.⁶⁵

4. Deliverability

99. Large-Scale Solar and CalWEA assert that CAISO's proposed language for section 8.3 erroneously precludes distribution-level generators that are not in a PTO service area from obtaining full capacity deliverability status and fails to provide certainty to developers of such projects about the process for being studied for full capacity status. They ask the Commission to require CAISO to modify the language in section 8.3 to read as follows:

An Interconnection Customer seeking interconnection to a Distribution System connected to the CAISO Controlled Grid, where the Participating TO's tariff or other applicable interconnection rules do not preclude Full Capacity Deliverability Status on the CAISO Controlled Grid, may elect a one-time option to be studied for Full Capacity Deliverability Status by entering a Cluster Application Window prior to, or immediately after, execution of the agreements necessary for interconnection to the Distribution System.⁶⁶

100. Large-Scale Solar and CalWEA also ask that the Commission direct CAISO to incorporate into section 8.2.4.3 a provision that it will require CAISO to identify conceptual transmission congestion mitigation plans for generation assessed in the annual deliverability study that was denied full capacity deliverability and to consider them in its comprehensive transmission planning process.⁶⁷

101. In its answer, CAISO argues that Large-Scale Solar and CalWEA's proposed revision to section 8.3 should be rejected as inappropriate because the proposal would inappropriately interject CAISO into the PTOs interconnection proceedings under their WDATs.⁶⁸ According to CAISO, requiring a deliverability assessment simply because a

⁶⁵ CAISO Answer at 23.

⁶⁶ CalWEA Comments, Attachment A at 2-3, Large-Scale Solar Comments, Attachment A at 2-3.

⁶⁷ *Id.* at 3.

⁶⁸ CAISO Answer at 33-34.

PTO's WDAT does not foreclose one amount to requiring CAISO to make interconnection decisions that are more appropriately left to the PTO.

102. CAISO further argues that Large-Scale Solar and CalWEA's proposed revision to section 8.2.4.3 should be rejected because it is outside the scope of this proceeding and represents an issue appropriately considered in transmission planning proceedings.⁶⁹

Commission Determination

103. We disagree with Large-Scale Solar and CalWEA that proposed section 8.3 should be modified. Large-Scale Solar and CalWEA acknowledge that CAISO's proposed section 8.3 provides significant benefits to generators taking service under a PTO tariff and to the resource adequacy program. They do not explain, however, why CAISO's proposal is not just and reasonable. Nor do they explain fully what their proposed modifications to section 8.3 are intended to achieve. We also agree with CAISO that Large-Scale Solar and CalWEA's proposed section 8.3 has the potential to inappropriately interject CAISO into a PTO's WDATs interconnection process. Because Large-Scale Solar and CalWEA have not shown CAISO's proposed section 8.3 to be unjust and unreasonable and because the purpose and intent of their proposed revisions were not explained, we decline their request.

104. We find Large-Scale Solar and CalWEA's request that the transmission planning process should consider the reason why generation was denied full capacity status and whether such outcomes should influence transmission planning decisions to be outside the scope of this proceeding and reject Large-Scale Solar and CalWEA's proposed tariff modifications.

5. Financial Security Requirements

105. CalWEA and Wellhead share concerns that the proposed Phase I and Phase II study processes as set forth in section 6.9.2 need to be revised to provide more accurate estimates of network upgrade costs. Wellhead asserts that not providing for an adjustment to the security posting at the end of the Phase 1 study to accommodate a project that downsizes to avoid a costly system upgrade could be problematic. CalWEA is concerned that the Phase I and Phase II technical study processes that identify and allocate the costs for network upgrades generally produce inaccurate and excessively

⁶⁹ *Id.* at 32-33.

large cost assessments, which could cause developers to abandon viable renewable projects.⁷⁰

106. Large-Scale Solar and CalWEA seek clarification that section 9.2, which provides for a \$15 million cap on the second interconnection financial security postings, would apply to the LGIP transition cluster, as was stated by CAISO during the stakeholder process.⁷¹

Commission Determination

107. For small generators, the newly harmonized cluster study process will improve the accuracy of network upgrade cost responsibility estimates by studying electrically related projects interdependently. Under the current disconnected SGIP and LGIP processes, a small generator interconnection customer's estimated cost responsibility depends on the next LGIP cluster study and all electrically related projects ahead of it in the queue, creating the potential need for restudies and significant cost adjustments further along in the study process. Thus, the combined cluster study process should provide better up-front cost certainty for small generators. However, we encourage CalWEA to pursue its commitment to working with CAISO to further refine the accuracy of Phase I and Phase II study results to the benefit of interconnecting generators of all sizes.

108. In response to Wellhead's concerns, we acknowledge that section 6.9.2 of the GIP provides the opportunity for interconnection customers to downsize their projects at the conclusion of the Phase I study. Consistent with Commission precedent,⁷² we agree with Wellhead that requiring security postings to be modified to ensure that financial security deposits do not exceed the customer's possible cost exposure for its resized project is reasonable. Otherwise, interconnection customers could be forced to withdraw their interconnection requests if security deposit postings fail to reflect the accurate cost responsibility of a given request. Therefore, CAISO is directed to submit a revision to its GIP to provide that the amount of the initial interconnection financial security posting for customers following its Phase I Study will not exceed the interconnection customer's estimated network upgrade cost responsibility for its downsized project.

⁷⁰ CalWEA Comments at 5.

⁷¹ *Id.*

⁷² *Calif. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,005 (2010).

109. CAISO points out in its answer that section 9.2 does not contain the relevant cap on second interconnection financial security postings.⁷³ In section 9.3.1.2 of the proposed GIP, however, CAISO provides that a \$15 million dollar cap applies for “each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process.”⁷⁴ We find that this definition of customers for whom the \$15 million dollar cap on second interconnection financial security postings apply is broad and inclusive enough that it does not require further clarification.

6. Fast Track Process

110. FIT argues that the expanded Fast Track process under the proposed GIP would still be inaccessible to most small generators. In particular, FIT asserts that the second screen in the Fast Track process, which requires that a proposed Fast Track project and any other generation on the circuit at issue be no more than 15 percent of the circuit’s peak load, would likely exclude most projects larger than 3 MWs. Thus, FIT claims that CAISO’s proposed expansion of the Fast Track process to generators up to 5 MW will be essentially meaningless unless the second screen is eliminated.

111. The Joint Solar Parties believe that the proposed Fast Track should be expanded to 20 MW, to accommodate all small generators who might have otherwise proceeded under SGIP. While they believe that the expansion of Fast Track eligibility from 2 MW to 5 MW is a step forward, the Joint Solar Parties question why CAISO failed to elaborate on why it is not feasible to consider systems larger than 5 MW or if 20 MW would still be “relatively small” from an engineering perspective. They argue that further stakeholder process is required to ensure that a system size cap for Fast Track eligibility has a reasonable bearing on related grid impacts and is not just an arbitrary or subjective number. The Joint Solar Parties request that CAISO raise the Fast Track cap to 20 MW or remove the cap entirely, and allow the Fast Track screens to be the limiting device.⁷⁵

112. Wellhead states that its understanding is that the Fast Track process is to apply only to energy-only interconnection requests and asks that this be expressly stated in the GIP.

⁷³ CAISO Answer at 31-32 and n.66.

⁷⁴ CAISO Tariff, Appendix Y, section 9.3.1.2.

⁷⁵ Joint Solar Parties Protest at 17-18.

113. In its answer, CAISO confirms that Wellhead's understanding is correct and offers to clarify in a compliance filing that the Fast Track process is solely for energy-only projects.

Commission Determination

114. We accept CAISO's proposed modifications to its Fast Track process as a reasonable approach to attract a broader range of potential interconnection customers to this process, while ensuring the safety and reliability of the proposed interconnection and the transmission grid at-large. In Order No. 2006, the Commission imposed screens in its *pro forma* Fast Track process so as to minimize the chance that a proposed interconnection that passed the screens would impact the safety and reliability of the transmission provider's electric system.⁷⁶ The thresholds ultimately approved in Order No. 2006 were vetted by transmission providers, small generator developers, and representatives of state regulators across the United States.⁷⁷ The 10 screens that CAISO has used for years under its current SGIP process were taken directly from Order No. 2006. However, CAISO's proposed modifications to its Fast Track process, which were vetted via a stakeholder process, illuminate the reality that the thresholds approved in Order No. 2006 may have been more restrictive than necessary when applied to the CAISO grid. This is evidenced by the fact that no small generators have utilized or benefited from this process since its inception. Thus, we find it appropriate to consider a different approach prospectively, provided reliability and grid safety are adequately maintained.

115. We also note that, while Order No. 2006 contemplated interconnection of small generators at the distribution level, distribution level interconnections are generally handled pursuant to the terms and conditions of a PTO's WDAT. Thus, we accept CAISO's statement that, from a transmission engineering perspective, a 5 MW generating facility that satisfies the Fast Track screens is relatively small and generally would cause no greater impact than a 2 MW generator to safety and reliability of the CAISO-controlled transmission grid.⁷⁸

116. We deny FIT's request to eliminate the second screen of the Fast Track process, which restricts interconnections to 15 percent of the line section annual peak load. No analysis has been provided by FIT to support a finding that elimination of the second

⁷⁶ Order No. 2006, FERC Stats. & Regs. ¶ 31,180 at P 171.

⁷⁷ *Id.*

⁷⁸ CAISO Transmittal Letter at 21.

screen would yield the result sought or whether this could be done without a detrimental impact to the CAISO-controlled grid.

117. With respect to FIT's request for data, we find it appropriate to monitor the use of the Fast Track modifications proposed herein. Thus, we will require CAISO to provide informational updates relating to the use of this process in its LGIP quarterly reports on the progress in processing interconnection requests to the Commission. CAISO should include in its reports the size and type of generator interconnection requested under the Fast Track process, the proposed location of the generator, the number of requests that did not pass the screens, and which screens the generator developer failed.

118. Finally, we accept CAISO's commitment to modify the GIP to explicitly state that the Fast Track process is available solely for energy-only projects in a compliance to be filed within 30 days of the date of this order.

7. Transition from SGIP to GIP

119. Acciona requests clarification that any deposits that it has already paid for its two late stage projects that are eligible to transition to the new GIP would be fully credited toward study deposits required under GIP once the projects transition to the GIP. Acciona also wants to verify that deposits that are reasonably anticipated to be made in the next step of a project's SGIP process can still be made and similarly credited toward study deposits required under GIP. Acciona proposes the following edits to section 2.2 of Appendix 8 of the GIP to address its concerns:

Interconnection Customers electing this one-time option will be required to post a study deposit in the amount set forth in Section 3.5.1 of this GIP, less any study deposit amounts already paid and any study deposit reasonably anticipated to be paid if the Interconnection Customer's Generating Facility is still in the CAISO's interconnection queue.

120. Acciona claims that, without the proposed clarifications, projects such as those it has planned for, and for which it has relied on certain imminent future costs, may be forced to submit total deposits greater than those submitted by projects electing for the one-time full capacity deliverability option via section 8.1 of the proposed tariff, or those projects electing for the full capacity deliverability option when transitioning via section 3 of Appendix 8.⁷⁹

⁷⁹ *Id.* at 6-7.

121. Large-Scale Solar and CalWEA recommend two changes to section 3.3 of Appendix 8 to the GIP. First, they contend that the requirement of a demonstration of site exclusivity by interconnection customers in the SGIP Transition Cluster is unnecessary because SGIP projects already have to demonstrate site control - a stronger demonstration than site exclusivity. In addition, they ask that the Commission require CAISO to give these projects the option of posting an “in-lieu” deposit instead, consistent with the options available to LGIP projects. Second, they argue that the refund provisions should exclude the term “third parties” as redundant and confusing because costs for any third parties under CAISO or PTO contract would count under CAISO/PTO incurred expenses.

122. In its answer, CAISO agrees with Acciona’s requested clarification and proposes to make the necessary tariff modifications on compliance.⁸⁰ CAISO argues that there is no need to make the first of CalWEA and Large-Scale Solar’s requested modifications to section 3.3 of Appendix 8 to the GIP. CAISO contends that, by virtue of their demonstration of site control, SGIP projects have *a fortiori* demonstrated site exclusivity, which means that the SGIP projects have satisfied the “done so already” language of section 3.3. However, CAISO agrees with CalWEA and Large-Scale Solar’s second proposed edit to section 3.3 and proposes to delete the term “third parties” in a compliance filing.

123. Full Circle argues that delaying implementation of renewable energy projects that would otherwise be considered “shovel ready” would have a detrimental effect on manufacturing jobs nationwide and construction jobs in California, and would delay economic investment efforts in the capital markets.

124. In the interest of promoting job creation in California, Full Circle proposes adding an additional provision to the Commission’s order in this docket, to read as follows:

Any generation project that has applied for interconnection to the CAISO grid under the Small Generator Interconnection Application Process prior to 12/31/2010 that has also applied for and/or received Building Permits from the local building authority having jurisdiction over the generator project site prior to the publication of the FERC’s response to CAISO regarding this Tariff Amendment to Revise Generator Interconnection Procedures, shall be expeditiously processed by CAISO under the existing Small Generator

⁸⁰ CAISO Answer at 35.

Interconnection Application Process, and not be delayed in any way by the cluster study process.⁸¹

Full Circle argues that its proposed additional language would not complicate the implementation of the cluster process under the GIP because the capacity of projects to which Full Circle's proposed language applies can be used as the starting basis for cluster studies under the GIP.

Commission Determination

125. We agree with Acciona's proposed modification to section 2.2 of Appendix 8. To the extent that interconnection customers transitioning from SGIP to GIP have already paid deposits toward their SGIP studies, it is reasonable for such customers to receive a credit toward GIP study deposits when they transition to the GIP. Therefore, we accept CAISO's commitment to revise section 2.2 of Appendix 8 consistent with our finding here in a compliance filing in 30 days.

126. We reject Large-Scale Solar and CalWEA's requested changes to section 3.3 of Appendix 8 relating to site exclusivity. Because, as CAISO acknowledges, interconnection customers are already subject to a stronger demonstration under the SGIP than is required under the transition provisions, projects that enter into the SGIP Transition Cluster will be deemed to have demonstrated site exclusivity. There is no need to revise the tariff because these projects are covered by the "done so already" language of section 3.3.⁸² We have previously found the site exclusivity provisions just and reasonable as applied to LGIP interconnection customers. Without more substantive explanation of their concern than simple inclusion in an attachment to their comments, Large-Scale Solar and CalWEA do not provide a sufficient basis to reject the provision in CAISO's proposed GIP tariff revision. We accept CAISO's commitment to modify section 3.3 of Appendix 8 to the GIP to remove the words "third parties" and will require it to submit a compliance filing within 30 days of the date of this order making this change.

127. We reject Full Circle's proposed additional language. CAISO has proposed a transition of existing SGIP interconnection requests to the GIP that is based on whether

⁸¹ Full Circle Comments at 4.

⁸² Section 3.3 of Appendix 8 to the GIP states that: "An Interconnection Customer in the SGIP Transition Cluster must post...a demonstration of Site Exclusivity, if it has not done so already."

customers with valid interconnection requests have executed a system impact study or facilities study agreement providing for the completion of such studies by December 19, 2010, the requested effective date of the GIP tariff amendment. We find CAISO's proposed transition provisions to be a just and reasonable recognition of the progress of interconnection requests through the interconnection process. Full Circle does not provide any reason to find CAISO's proposed transition provisions to be unjust or unreasonable. Nor does Full Circle provide any evidence to justify its proposed transition provisions as just and reasonable, or directly related to a project's progress in CAISO's interconnection process.

8. Miscellaneous

128. Large-Scale Solar and CalWEA seek clarification that CAISO did not intend to change the meaning of section 6.2 to mean that concurrence of the interconnection customer is no longer required following the scoping meeting. They assert that CAISO should ensure that the final minutes from the meeting reflect any disagreements by the interconnection customer with CAISO's account of the meeting and that CAISO should distribute the minutes within three business days of the meeting.

129. The Joint Solar Parties ask the Commission to clarify its policy regarding QF interconnections. While the Commission has repeatedly stated that states have jurisdiction over the interconnection of QFs where the QF sells its total output to an interconnected utility or to an on-site customer, the Joint Solar Parties claim that there has been confusion over whether this principle applies to QF sales that are not at avoided cost. Given that these inconsistent regulatory signals create uncertainty in the path forward for California's wholesale distributed generation programs, they ask that the Commission clarify that states may assert jurisdiction over the interconnection of a QF to a distribution system, whether or not the sale is at avoided cost. They assert that this clarification would ensure that a utility that operates a distribution system that is not subject to a FERC-jurisdictional OATT will not transform its distribution system into a FERC-jurisdictional "dual use" facility if it interconnects a QF selling at a price other than avoided cost. The Joint Solar Parties claim that without this clarification, utilities in many parts of the country may be reluctant to participate in state-developed wholesale procurement programs that target interconnections to the distribution system. The Joint Solar Parties also request that the Commission affirmatively clarify that state jurisdiction over QF interconnection still applies even if utility "must buy" obligation under the Public Utilities Regulatory Policies Act (PURPA) has been relieved.⁸³

⁸³ Joint Solar Parties Protest at 19-20.

130. In the alternative, the Joint Solar Parties request that the Commission allow some flexibility in applying its policy of extending jurisdiction over wholesale generator interconnections to distribution systems where state rules exist to facilitate such interconnection. They argue that state oversight over distribution level interconnections would provide consistency in the interconnection process that could apply across utilities and would allow states more flexibility in integrating generator interconnection processes into state procurement programs for distributed generation.

131. The Joint Solar Parties believe that states should, at minimum, be able to petition the Commission to have state interconnection rules apply in the place of SGIP if the state can meet the same standard placed upon jurisdictional utilities. They contend that this would ensure the Commission quality control in its jurisdictional interconnection standards as it would have a valid grounds for rejecting any interconnection standards where there is a reasonable basis to hold that a state's rules are not "consistent with or superior to" the Commission's *pro forma* rules.⁸⁴

132. CalWEA argues that a meaningful way in which CAISO could achieve its goals of establishing a more efficient interconnection process and provide small generators earlier cost certainty would be by harmonizing the Phase II GIP study process with CAISO's Revised Transmission Planning Process (RTPP).⁸⁵ CalWEA asserts that the RTPP schedule should be tightly coordinated with the GIP schedule so that all GIP-related transmission upgrades are identified as part of a single, Order No. 890-compliant, planning process. Furthermore, it contends that all upgrades identified through the RTPP should either be up-front financed by the relevant PTO, or, if the PTO is not willing to provide up-front financing, by an independent transmission company that would become a CAISO PTO.

133. Large-Scale Solar and CalWEA argue that CAISO should be required to delete from the GIP Appendix 4 reference to the queue cluster study timeline which it claims inappropriately allows for consideration of modifications to LGIP-identified upgrades in the annual CAISO transmission-planning process. They contend that the provision should be deleted because it is a part of CAISO's RTPP proposal that has yet to be

⁸⁴ *Id.* at 21-22.

⁸⁵ CAISO's RTPP filing is currently pending before the Commission in Docket No. ER10-1401-000.

accepted by the Commission. They also argue that the timelines for the ISP and Fast Track Process should be included in Appendix 4.⁸⁶

134. Large-Scale Solar asks that the Commission require CAISO to proceed expeditiously with a stakeholder process to deal with outstanding issues including: start of construction clarification, developer information, study methodology, project financing issues, and modifications of security postings.

135. Large-Scale Solar and CalWEA assert that the technical data requested in Attachment A of the *pro forma* interconnection request should be modified. They state that the data requested in section 11a is inconsistent because it asks for equivalenced data but then refers to data for each collector circuit. They claim that the equivalenced data should be submitted per the data form provided in the draft “WECC Guide for Representation of Photovoltaic Systems In Large-Scale Load Flow Simulations” or its wind counterpart the “WECC Wind Power Plant Power Flow Modeling Guidelines.” They also contend that section 12 should provide flexibility in how interconnection customers provide electrical data to CAISO to populate the power flow models because not all generators have access to the power flow software specified in section 12 to generate the data in the requested format.⁸⁷

Commission Determination

136. The proposed language change in section 6.2 that concerns Large-Scale Solar and CalWEA does not have the limiting effect that they claim. Under CAISO’s GIP proposal, the interconnection customer’s input following a scoping meeting is changed from the current approach of verifying the minutes to having an opportunity under the GIP to confirm the accuracy of the minutes. However, section 6.2 retains provisions that mandate at a minimum a discussion among the applicable PTO(s) and CAISO, and do not interfere with an interconnection customer’s opportunity to disagree with CAISO’s draft minutes. CAISO’s proposed language is just and reasonable and, thus, we reject Large-Scale Solar and CalWEA’s request to modify section 6.2 of the GIP.

137. Joint Solar Parties’ concerns relating to Commission policy regarding QF interconnections and other issues relating to Commission policy regarding jurisdiction over wholesale generator interconnections to distribution systems are beyond the scope of

⁸⁶ CalWEA Comments, Attachment A at 4, Large-Scale Solar Comments, Attachment A at 4.

⁸⁷ *Id.*

these proceedings. Interconnections to distribution systems are the subject of WDATs, rather than CAISO's generator interconnection procedures.

138. The Commission will not require CAISO to delete from the GIP Appendix 4 references to the queue cluster study timeline allowing for consideration of modifications to LGIP-identified upgrades in the annual CAISO transmission planning process. In a concurrently issued order on CAISO Revised Transmission Planning Process, we accept the inclusion of LGIP-identified upgrades in CAISO's annual transmission-planning process.⁸⁸

139. The Commission rejects Large-Scale Solar's request that we direct CAISO to address in a stakeholder process particular issues that Large-Scale Solar deems outstanding. Nor will we direct changes to the technical data requested in Attachment A of the *pro forma* interconnection request. As to the requested modification of technical data, Large-Scale Solar and CalWEA have not provided sufficient evidence that CAISO's proposal is unjust or unreasonable. We find that CAISO's proposal is just and reasonable and accept CAISO's proposed tariff revisions.

140. We reject the request to modify CAISO's data requirements as outlined in Attachment A of the *pro forma* interconnection request. The attachment to Large-Scale Solar and CalWEA's comments provide very little discussion or context for their requested data modifications. For example, section 11 does not appear to address equivalence data, and in any event there is no reason to believe that by referring to "data for each collector circuit," CAISO is not referring to "data for each equivalence collector circuit." In addition, CalWEA and Large-Scale Solar do not provide us with sufficient reason to find that an interconnection customer must have access to a particular software in order to supply the technical data required under section 12 and we reject the request to modify CAISO's filing in that regard.

141. Finally, an attachment to CAISO's answer included a number of minor clarifications to the language initially filed in this proceeding. Those changes primarily clarify that the GIP applies to both large and small generator interconnections. We accept the tariff changes as proposed and direct that CAISO include them in a compliance filing to be made within 30 days from the date of this order.

⁸⁸ See *California Indep. Sys. Operator Corp.*, 133 FERC ¶61,224 at P 92 (2010).

The Commission orders:

(A) CAISO's GIP proposal is hereby accepted, subject to modification, as described in the body of this order, effective December 19, 2010, as requested.

(B) CAISO is hereby directed to submit a compliance filing, within 30 days of the date of this order, as discussed in the body of this order.

(C) CAISO is required to include in future LGIP quarterly reports information on its Fast Track and ISP processes, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Document Content(s)

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