

## Stakeholder Comments Template

### Subject: Generation Interconnection Procedures Phase 2 (“GIP 2”)

Submitted by	Company	Date Submitted
<i>Gary Holdsworth gary.holdsworth@sce.com</i>	<i>Southern California Edison</i>	<i>5/5/2011</i>

This template was created to help stakeholders structure their written comments on topics detailed in the April 14, 2011 *Straw Proposal for Generation Interconnection Procedures 2 (GIP 2) Proposal* (at <http://www.caiso.com/2b21/2b21a4fe115e0.html>). We ask that you please submit your comments in MS Word to [GIP2@caiso.com](mailto:GIP2@caiso.com) no later than the close of business on May 5, 2011.

Your comments on any these issues are welcome and will assist the ISO in the development of the draft final proposal. Your comments will be most useful if you provide the reasons and the business case for your preferred approaches to these topics.

Your input will be particularly valuable to the extent you can provide greater definition and clarity to each of the proposals as well as concerns you may have with implementation or effectiveness.

**Comments on topics listed in GIP 2 Straw Proposal:****Work Group 1**

1. Develop procedures and tariff provisions for cost assessment provisions.

Comments:**General Comments:**

For purposes of our discussion, SCE will refer to this proposal as the Item 1 proposal, as “economic test” does not accurately describe the CAISO’s proposal.

SCE is supportive of pursuing an optimal mix of transmission in California to support public policy goals. SCE appreciates that the CAISO is searching for a way to ensure that only this optimal mix of transmission, and no more, gets constructed. The CAISO, PTOs, the CPUC, and stakeholders have been struggling to find a centralized planning model approach to achieve this goal for several years. Much study and planning work has occurred to date, such as the work performed by the CAISO South Regional Transmission Planning group (CSRTP), the Renewable Energy Transmission Initiative (RETI), and the California Transmission Planning Group (CTPG) and the CAISO TPP have all sought to put forth plans to ensure enough transmission is constructed to achieve California’s public policy goals. CAISO’s proposed “end state” included in the Item 1 proposal may be another way to achieve the objective of optimal transmission. However, the lack of implementation or transition details makes it difficult for SCE to determine whether it can support CAISO’s Item 1 proposal.

The Item 1 proposal will likely increase PTOs required investment in transmission upgrades, but the extent of that increase has not been quantified nor has SCE incorporated any such additional investment into its long-term investment plans. This also impedes SCE’s ability to determine whether it can support CAISO’s Item 1 proposal.

SCE has, in various forums, has taken positions on issues pertaining to the construction, planning, financing and ratemaking for transmission facilities. SCE intends to fully preserve such positions, and because at this juncture SCE cannot fully understand the CAISO proposal and its impact on SCE’s positions, SCE cannot determine if it can support the Item 1 proposal or any aspect thereof.

Having said that, SCE will remain engaged in the CAISO’s stakeholder process and will seek to quantify and fully understand all the impacts of the CAISO’s Item 1 proposal, which may lead to SCE later being able to determine whether it can support the Item 1 proposal.

**Specific Comments:**

SCE wishes to better understand the “end state” that the CAISO has placed in the straw proposal. SCE is likewise very interested in how the CAISO intends to arrive at this “end state”. Understanding the implementation details are key to whether SCE will support this proposal.

For example, the Item 1 proposal discusses how GIP-driven upgrades might be subsumed by the upgrades approved in the TPP. SCE seeks to ensure that the Item 1 proposal does not undermine the substantial amount of work that goes into the GIP studies. Likewise, SCE is concerned that TPP is not sufficiently developed to handle the added complexity of the analysis required under the Item 1 proposal.

The Item 1 proposal requires ICs that require network upgrades that are not on the “approved” list to finance those upgrades, without refunds. This provision appears to eliminate the “maximum financial responsibility” or cost cap for those ICs whose upgrades are not “approved” in TPP. Although it was discussed briefly in the April 28 stakeholder meeting that the cost caps might still apply, SCE does not agree to backstop finance amounts in excess of the IC’s maximum financial responsibility for those upgrades that are not “approved” via TPP. ICs should bear full financial responsibility for unapproved upgrades.

SCE sees no mention in the Item 1 proposal about abandoned plant cost recovery, which is a very real concern of SCE because the Item 1 proposal has the ability to increase the requirements on Participating Transmission Owners (PTOs) to upfront finance certain network upgrades on a non-voluntary basis. In return for this requirement, SCE believes that PTOs must, at a minimum, have stronger assurances of being able to recover prudently-incurred costs of such transmission facilities if the facilities are abandoned for reasons beyond control of the PTO. This point is further discussed in SCE’s April 12 straw proposal to the CAISO in which SCE proposed amending the CAISO tariff to provide a pre-approved eligibility for 100% of abandoned plant costs incurred by PTOs for network upgrades where the PTO is required to upfront finance on a non-voluntary basis. SCE’s straw proposal was submitted prior to CAISO’s publishing of the Straw Proposal including Item 1. With the addition of the Item 1 proposal, the need for PTOs ability to recover abandoned plant costs is even more acute, making the case of automatic 100% abandoned plant even stronger.

Also missing from the CAISO Item 1 straw proposal is the MISO concept of “shared network upgrades” i.e., for those upgrades that become 100% IC financed (i.e., “not approved” for refunds). The imposition of this financing responsibility resurrects the free-rider problem, a problem that was largely solved by the first round of GIP reforms through the implementation of the cluster study process. The free-rider problem is thus: if an IC(s) is(are) required to finance a network upgrade without refunds through the TPP, and the network upgrades are also needed and used by subsequent cluster study participants, do the late comers receive a “free ride”, or do they pick up a portion of the financial responsibility of those upgrades

required by earlier queued generation? In the procedures adopted by MISO, the late comers seeking to interconnect to a previously IC-financed network upgrade get allocated a portion of the cost of the upgrades. The CAISO should address this free-rider problem at the same time and not wait for a future stakeholder process to address it.

SCE is very interested in working with the CAISO towards developing the various implementation details in this proposal. SCE lists some of the implementation details that it believes should be answered/included in the draft final proposal.

Necessary Implementation Details:

- Will the Item 1 proposal be implemented only on a prospective basis? In other words, will projects that have already either been approved by the CAISO, or included in an executed LGIA be exempt from further review by the TPP? SCE would expect this to be the case.
- The CAISO will need to determine which Annual Transmission Plan will be the basis of the first round of TPP-GIP evaluation. If it is decided that the 2011/2012 plan (currently in Phase I, and which should conclude Phase I around January 2012) then it stands to reason that the first “re-evaluation” of GIP upgrades in TPP should occur in QC5, which cluster window closes on March 31, 2012.
- As the 33% RPS is fundamentally procurement based, how will the CPUC/CAISO annual determination of resource portfolios reach a consensus on when California has “enough” transmission facilities to deliver sufficient resources to meet the 33% procurement targets? Based on the draft 2010/2011 CAISO Transmission Plan, under certain assumptions, the CAISO stated that it has already approved enough transmission to get to 33% RPS.
- As mentioned in the April 28 stakeholder meeting, SCE would expect the TPP to include a “cushion” of resources above 33% to account for generator attrition through the generation permitting/licensing process and financing rounds.
- Does the CAISO believe that the Item 1 proposal will require a change to the CPUC procurement rules? CPUC rules are based on the concept of a “least cost best fit” in connection with the current transmission planning structure. Under this Item 1 proposal, SCE is concerned that ICs might exercise market power, leading to the purchase price of power coming from “approved” areas being higher than would be otherwise under the current procedures, which would increase overall ratepayer costs.
- Will ICs that hold PPAs with LSEs within the CAISO footprint have some type of priority to transmission approved within the TPP framework versus those ICs that do not hold PPAs?
- How will out-of-state renewable resources be addressed in relation to “approved areas” and the TPP, whether or not the out-of-state resources have PPAs with LSEs within the CAISO footprint?
- Will there be any distinction in the TPP approval process for reliability network upgrades, plan of service reliability network upgrades, or delivery network upgrades? For example, as delivery network upgrades have historically been viewed as

somewhat “optional”, whereas the reliability network upgrades have historically been viewed as “must build”, will the delivery upgrades be more or less likely to be approved as needed under TPP? Also, upgrades can be found to have both reliability and delivery drivers, how will such upgrades be evaluated under the new TPP?

- Notwithstanding the Item 1 proposal, SCE expects the “PTO-requested post-Phase II re-evaluation of the plan of service” that SCE submitted in its April 12 straw proposal will still be required under the Item 1 paradigm in order to adjust for any late-stage modifications of plans of service necessitated by late withdrawals (even after execution of GIAs) or changes in scope and cost due to licensing/permitting activities. If anything, the re-evaluation may be more needed and useful under the Item 1 proposal than previously.
- SCE agrees that CAISO will be required to adopt a stronger stance towards “policing” the queue, to ensure that IRs that are not making progress towards commercialization do not “hog” approved transmission capacity that could otherwise be used by later queued IRs.
- Several stakeholders, including SCE, were perplexed by the discussion in the April 28 stakeholder meeting about “excess MW”, over and above the amount approved in the TPP. As mentioned earlier, since 33% appears to be within reach, and certain of the “best” resource zones are already severely oversubscribed (in SCE’s estimation), this point needs much further discussion. CAISO needs to outline how the “approved” elements of the plan will be allocated to IRs in the study group, particularly as it relates to IRs that are energy only versus IRs that chose fully capacity deliverability and required delivery upgrades. CAISO will also need to determine how to translate scope of upgrades into MW of transfer capability, because it appears the CAISO is basing its allocation on MW of transfer capability which may not have a one-to-one correspondence with the scope of the upgrades.
- How is the CAISO intending to evaluate transmission impacts of WDAT interconnection projects in TPP? The Item 1 proposal is focused on transmission-level interconnections, but an interconnection under the PTO’s WDATs could also require transmission upgrades. SCE’s position is that the GIP/TPP interaction would be exactly the same for any network upgrades triggered by WDAT applications. In other words, to the extent that WDAT requests require upgrades to the transmission system, they should be treated just as any other upgrades evaluated in the TPP. SCE is seeking to avoid another “squeeze of the balloon” towards WDAT if ICs suddenly view the CAISO interconnection as too risky or expensive due to the risk of financing upgrades without refunds.
- How will the Item 1 proposal impact interconnection requests for non-renewable generation, and in particular the network upgrades required by such non-renewable generation?
- Will the CPUC/CAISO determination of resource portfolios be informed or influenced at all by local business development, land-use, environmental, or other local policy objectives/goals that may or may not be known to the CPUC/CAISO but are nevertheless very important to local business and governmental leaders? It occurs

- to SCE that a centralized planning type of approach, which is the basis of the Item 1 proposal, may not always pick up on the local preferences and desires. These preferences and desires could become much more important in the licensing/permitting of “needed” transmission, which without the local support, may never get off the ground permits-wise.
- As stated in our general comments, the Item 1 proposal also appears to shift much of the upfront financing burden from ICs to PTOs. SCE has not agreed to assume this financing obligation, but even if it did, SCE believes that PTOs should have much stronger assurances (such as automatic approval of 100% abandoned plant cost recovery) of being able to recover prudently-incurred costs of such transmission facilities that PTOs are required to upfront finance (non-voluntarily) if the facilities are abandoned for reasons beyond the control of the PTO. This Abandoned Plant provision should be included in both the GIP and TPP, as requested in SCE’s straw proposal submitted to the CAISO on April 12.
  - Who will construct those upgrades that are **not** approved in the TPP?. These “unapproved” upgrades are 100% financed by the interconnection customers, without refunds and therefore if constructed by PTOs, the PTOs will not be able to place such facilities into its rate base. Therefore the PTOs would have no motivation to construct the upgrades, but will have all of the safety, performance, resource, and other risks from constructing transmission while receiving no earnings benefit from the resources expended. This does not seem equitable to SCE.
2. Clarify Interconnection Customer (IC) cost and credit requirements when GIP network upgrades are modified in the transmission planning process (per the new RTPP provisions)

Comments:

Much of the need for Item #2 is done away with under the Item 1 proposal, because Item 1 will amend the GIP to clarify that when GIP upgrades are modified by TPP the IC’s cost and security requirements cannot increase but can be adjusted downwards, if warranted. This provision, of course, places the financial responsibility for cost increases to PTOs, and is similar to other GIP provisions that also require PTOs to become the “financier of last resort”.

In its April 12 straw proposal on post-Phase II re-evaluations and Abandoned Plant Cost Recovery for non-voluntarily upfront financed network upgrades, SCE specifically addressed its concerns in relation to upfront financing and abandoned plant. SCE has in several cases voluntarily agreed to upfront finance network upgrades required by interconnecting generators. In each case, SCE has made these financial commitments contingent on receipt of 100% abandoned plant cost recovery assurance from FERC. The CAISO has not opposed SCE’s seeking abandoned plant assurances in the past. SCE believes that its requirement to upfront finance network upgrades (on a non-voluntary basis) that result from the provisions in the GIP or TPP should likewise be contingent on receipt of 100% abandoned plant cost recovery assurance from FERC.

However, SCE is concerned that, among other things, the financing requirements created by the GIP and TPP provisions might lead to upgrades being financed by PTOs, that would be viewed by FERC as “routine” and therefore would not be found eligible for the 100% abandoned plant incentive if SCE had to seek 100% abandoned plant on a case-by-case basis. Therefore, SCE believes that a provision should be added to GIP and TPP that provides 100% abandoned plant cost recovery for prudently-incurred costs of network upgrades that a PTO is required to upfront finance as a result of the provisions in the GIP and TPP.

## Work Group 2

3. Participating Transmission Owner (PTO) transmission cost estimation procedures and per-unit upgrade cost estimates;

### Comments:

SCE supports the use of a common format for unit cost guides between the three PTOs. SCE already supplies a detailed explanation of how it applies the “factors” to its unit costs to arrive at final cost estimates. SCE believes that differences between PTOs in how factors are applied should be allowed, as long as the differences are reasonable.

For example, SCE has three levels of factors in its unit cost guide, which reflect low, medium, and high impact. Within these levels, SCE has placed what it views as reasonable assumptions as to what would be included in each level. For example, SCE views relatively flat desert or rural land as having relatively low impact to the cost of transmission facilities. Likewise, the low population density in these areas leads to lower cost due to less mitigation measures and less disruption to the construction schedule due to time-of-day restrictions, which translate into lower than average costs. On the other hand, in SCE’s territory, transmission through mountainous terrain or areas with higher population density, will increase costs, everything else being equal, therefore the higher impact factors are higher “multipliers” of the base unit costs. Other PTOs may have different views depending on their service territory, and such views, as long as they are reasonable and consistently implemented, should not be dictated by CAISO or stakeholders.

SCE’s cost estimates are appropriately conservative, with consistent contingency amounts used in the construction industry for conceptual-stage projects, which is what Phase I and Phase II studies are. SCE’s unit costs are refreshed every year based on actual costs of equipment exhibited over the preceding 12 months. SCE sees little value in the CAISO’s proposal to allow the use of actual costs of “comparable projects”, where available, in the interconnection studies, as typically no two sets of network upgrades are identical or comparable. However, SCE could agree to providing an explanation in the Phase I or Phase II study reports if the cost estimates came from actual costs rather than the unit cost guide.

4. Generators interconnecting to non-PTO facilities that reside inside the ISO Balancing Area Authority (BAA);

### Comments:

No further comment

5. Triggers that establish the deadlines for IC financial security postings.

Comments:

In SCE's comments on the Issues ID paper, SCE agreed that the required IFS posting date could be adjusted if true errors or omissions were discovered in the Phase II study, not just IC complaints of scope or cost of network upgrades and interconnection facilities that appear to SCE as an effort to lengthen the IFS posting deadline. There is room for adjusting posting requirements for true errors and omissions, but not for complaints.

However, CAISO appears to have taken this narrow view in the Issues ID paper and expanded it greatly in the Straw Proposal. In the process, however, SCE believes that the CAISO has created an inordinately complex Draft/Final study process for both Phase I and Phase II study reports that SCE rejects as too cumbersome to implement at the high volumes of interconnection requests that continue to be submitted by interconnection customers into the cluster study process.

As a result, SCE cannot support the Straw Proposal in this regard, for various reasons, including the following:

- CAISO is proposing to add substantial complexity into an already highly compressed and complex study and report production process. There are simply too many handoffs, results meetings, and other exchanges of information/comments in the CAISO proposal, each of which introduces the opportunity for delay. Compound that by hundreds of interconnection requests in a queue cluster the size of QC4, and one can understand how SCE views the CAISO proposal as simply unworkable at the volumes of interconnection requests currently experienced.
  - Phase I is already a highly compressed study, and since there is a cap on the amount of the first IFS posting for network upgrades, SCE sees little value in trying to get the Phase I study "perfect".
  - In an effort to be constructive, however, SCE recommends that if true errors or omissions are discovered, then the IFS posting clock can be reset, if the errors and omissions are discovered prior to the IFS posting date and the extension is reasonable.
  - Also, if some of the other issues in this Work Group become resolved (such as the clarification of constant vs. nominal dollars and clearly identifying the scope of upgrades/facilities that the IC can choose to build for itself, along with the detail of the scope and cost estimates for those facilities that could be removed from the PTO Interconnection Facilities, if requested by the IC) SCE estimates that roughly 90% of the past issues/concerns/complaints could be resolved, leaving much less need for the overly complex structure proposed by the CAISO in this issue #5.
6. Clarify definitions of start of construction and other transmission construction phases, and specify posting requirements at each milestone.



Comments:

SCE views the criteria that the CAISO have laid out for this item as insufficient. Generally speaking, PTOs do not break down IC financial responsibility per segment/phase of a transmission upgrade. SCE views taking additional planning/engineering resources to perform this breakdown would be an additional unnecessary drain on resources. As a very detailed construction schedule is an integral part of any licensing/permitting proceeding for transmission facilities, this master construction schedule should suffice in determining whether phasing of the IFS third posting will be allowed.

Thus, SCE suggests changing the criteria #1 as follows:

1. The Interconnection Customer's network upgrades are to be built in two or more separate and discrete transmission project phases/**segments**, and the IC's financial responsibility **for the total network upgrades is \$10 million or more;**

SCE understands that the primary concern of ICs is tying up credit/security for extended periods of time before the credit/security is actually needed/liquidated. However, SCE's also believes there should be a balance between that concern and making sure that sufficient funds are in place in advance of the actual construction phase of a transmission project begins, so the work is not interrupted or otherwise concerned about flow of funds. Furthermore, SCE's experience is that the actual construction of upgrades can often proceed quite rapidly, and can be of less duration than other phases of a project lifecycle, such as licensing/permitting. Certainly, larger upgrades that are typically constructed in multiple phases, over several years' time, are the target of this provision. And some phases/segments can be constructed in parallel, so it is the **span** of construction time that is the most important factor in determining eligibility for IFS phasing. Therefore, SCE also expects ICs to only be allowed to "phase" IFS postings for multi-segment/phase transmission upgrades with construction schedules for all segments/phases that span longer than 24 months from start of the first phase/segment to completion of the last phase/segment. Thus, SCE recommends the following change to criteria #2:

2. The **span of time between the** actual or anticipated start of construction date **in the master construction schedule** of the first phase/**segment and the completion of the last phase/segment is 24 months or greater**

With these new criteria in place, the milestone schedule for IFS posting should be tied to the completion of each phase/segment as set out in the master construction schedule. Again, because SCE sees little value in providing a breakdown of IC financial responsibility per phase/segment, a more simplified approach should be used to determine the milestone IFS posting schedule. SCE suggests the following approach.

3. **The IFS posting schedule for ICs that require upgrades that meet criteria #1 AND #2 shall be as follows:**
  - a. **IC(s) are required to post 50% of its total IFS requirement at start of construction of the first segment/phase (an increase from the 30% required in the second IFS posting)**
    - i. **If the cost of the first segment/phase is greater than 50% of the total cost of the upgrades, then the IC(s) would be required to**

**post 75% of its total IFS requirement at start of construction of the first segment/phase**

- b. IC(s) are required to post 75% of its total IFS requirement at start of construction of the second segment/phase**
  - i. If there are only two segments/phases, then the IC(s) would be required to post 100% of its total IFS requirement at start of construction of the second segment/phase**
  - ii. If the sum of the total cost of the first and second segment/phases is greater than 75% of the total cost of the upgrades, then the IC(s) would be required to post 100% its total IFS requirement at start of construction of the second segment/phase**
- c. IC(s) are required to post 90% of its total IFS requirement at start of construction for the third segment/phase**
  - i. If there are only three segments/phases, then the IC(s) would be required to post 100% its total IFS requirement at start of construction of the third segment/phase**
  - ii. If the sum of the total cost of the first three segments/phases is greater than 90% of the total cost of the upgrades, then the IC(s) would be required to post 100% of its total IFS requirement at start of construction of the third segment/phase**
- d. If there are four or more segments/phases, then the IC(s) are required to post 100% of its IFS requirement at the start of construction of the fourth segment/phase**

The key component in this phasing issue for SCE is to ensure that PTO actual spend not get out “ahead” of IC security postings or other financial commitment that is required of ICs. As long as the milestones and security postings are structured to avoid this risk, SCE can support this change to the GIP.

In regards to the CAISO’s discussion of “letter agreements” (in the form of an Engineering and Procurement agreement) in the Straw Proposal, SCE has some concerns.

First, the letter agreements are typically two-party agreements between the IC and SCE. The CAISO is not a party. Most letter agreements are for funding in cash certain pre-construction or procurement activities, and do not typically include a security posting. As a result, SCE does not view the existence of a letter agreement as any reason to modify the security posting requirements in the GIA.

- 7. Improve process for interconnection customers to be notified of their required amounts for IFS posting

Comments:

SCE agrees that this topic would be best addressed in a Business Process Manual (BPM) update.

8. Information provided by the ISO (Internet Postings)

As this is largely a CAISO-only issue, SCE has no further comments.

Comments:

**Work Group 3**

9. Develop pro forma partial termination provisions to allow an IC to structure its generation project in a sequence of phases.

Comments:

Having now seen the straw proposal, SCE has extreme reservations about the partial termination provisions. SCE understood that FERC viewed the non-conforming nature of the two LGIAs that had included this provision as a “one-time” allowance, due primarily to ARRA funding, and was never SCE’s intention to make it a permanent feature of the pro-forma LGIA. SCE’s concern is that such provisions greatly increase the level of uncertainty into the back-end of the interconnection process, just when one would want to have as much certainty as possible about what will actually be constructed. SCE is likewise concerned that LGIAs with the partial termination option could place in jeopardy the licensing/permitting of the upgrades, because the CPUC might not be persuaded that the upgrades will be found as “needed” if all the generation does not eventually show up.

SCE finds it hard to understand how the CAISO intends to “narrow” the amount of transmission in Item #1 that is approved/financed through the TPP provisions to allow only certain generating facilities to be constructed, while in this Item #9, the CAISO would allow these same generators the ability not to construct the full amount of generation that was called for in the TPP analysis. Plus, it is unclear how any freed-up transmission capability from this Item #9 could be re-allocated to generation that has already been “narrowed” out by the TPP. Sounds to SCE like a recipe for failure.

10. Reduction in project size for permitting or other extenuating circumstances

Comments:

SCE reiterates stakeholder comments during the April 28 meeting, that it seems inconsistent to allow generators the ability to partially terminate up to 75% of its project but only allow a 5% change in project size due to licensing/permitting-mandated reductions, without triggering a breach of the GIA or additional study.

SCE believes that the problem of reductions in output that come out of the generating facility’s permitting is exactly the type of problem that can be solved with the PTO-requested post-Phase II re-evaluation of the plan of service as outlined in SCE’s April 12 straw proposal.

11. Repayment of IC funding of network upgrades associated with a phased generation facility.

Comments:

SCE reiterates its comments at the April 28 stakeholder meeting that it might be much simpler (again, seeing how the goal should be to decrease uncertainty in the interconnection process, not add to it) for multi-phase generating projects to be required to submit separate interconnection requests for each of the respective phases.

12. Clarify site exclusivity requirements for projects located on federal lands.

Comments:

No further comments.

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

- a. Fast Track application to facility repowerings

Comments:

SCE agrees with the CAISO that the Fast Track should not allow larger facilities to incrementally expand using Fast Track. SCE also supports using the ISP as the primary study process track for repowering, as long as the facility meets the criteria for inclusion in the ISP.

- b. QF Conversion

Comments:

Generally, we view the proposed 4-path process as reasonable.

SCE agrees with the CAISO that “minor changes” needs further definition. SCE does not have a suggestion as to what would be considered a “minor change”.

- c. Behind the meter expansion

Comments:

SCE views the behind the meter expansion criteria as reasonable under conditions where the behind-the-meter expansion does not create a new reliability problem on the grid. The challenge is, however, that it is often impossible to know whether such behind-the-meter expansion will create a reliability problem without an interconnection study. For example, the proposed technical criteria state that “the reactive and short circuit electrical characteristics of the expanded capacity generation...must be equal or superior to the formally studied generators.” The meaning of the term “equal or superior” is unclear to

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SCE in the context of short circuit electrical characteristics. If the expansion creates an additional fault current source, that needs to be appropriately studied for safety and reliability, and such studies are done through the interconnection study process. The only project that appears appropriate for a behind-the-meter expansion model is a project with absolutely zero short circuit impact.

d. Distribution level deliverability

Comments:

SCE does not support a “safe harbor” for generating facilities no larger than 1 MW to be considered deliverable without the need for a deliverability assessment. The more that the CAISO allows exceptions to the deliverability rules, SCE believes it will result in an erosion of deliverability for existing deliverable resources and an increase in deliverability upgrade requirements for queued full-capacity resources. SCE believes that it is more important for CAISO to perform operational deliverability assessments to satisfy the operational study requirements in GIP Phase II studies (see Item #19 for further commentary on this point).

### Work Group 4

14. Financial security posting requirements where the PTO elects to upfront fund network upgrades.

Comments:

SCE does not object to making permanent the terms of the CAISO’s June 30, 2010 waiver petition at FERC regarding the second and third IFS posting requirements in the case where PTOs volunteer to upfront finance network upgrades. Clearly, the Item 1 proposal in the Straw Proposal will greatly change the need for this provision because the Item 1 proposal will automatically waive the IFS posting requirements for “approved” upgrades.

15. Revise ISO insurance requirements (downward) in the pro forma Large Generation Interconnection Agreement (LGIA) to better reflect ISO’s role in and potential impacts on the three-party LGIA.

Comments:

As SCE sees this as largely a CAISO-only issue, it has further comments.

16. Standardize the use of adjusted versus non-adjusted dollar amounts in LGIAs.

Comments:

SCE reiterates its position from its comments on the Issues ID paper that it makes sense for PTOs to be consistent in each PTOs approach to cost estimating and in generating payment schedules in GIAs. This does not mean, however, that PTOs need to be identical in cost estimating practices.

In reading the Straw Proposal, it appears that the CAISO wants two sets of numbers in interconnection studies and LGIAs: Base dollars (nominal) and adjusted dollars (constant), including an explanation in each study report as to the method of adjusting nominal dollars to constant dollars, such as the index used. SCE is already planning to issue its reports in this manner.

Where SCE believes the CAISO errs is in requiring inflation as the only element of dollar adjustment allowed to be used in the calculation of “constant dollars”. Typical “escalation” factors used throughout the construction industry can include a number of factors, more than an average inflation index (such as CPI, which measures consumer inflation, which might not be applicable to transmission equipment). As long as the PTO can justify its “escalation factors” used in its unit cost, estimating practices, study reports, and GIA appendices, the CAISO should be satisfied that the escalation is being properly applied to the studies and should not dictate that PTOs use the same specific index or escalation factor.

**17. Clarify the Interconnection Customers financial responsibility cap and maximum cost responsibility**

Comments:

SCE believes that the CAISO interpretation of the ambiguity that currently exists in the GIP is contrary to the intent of the original GIPR reforms, but SCE will agree to eliminate the ambiguity in the current GIP to reflect that the IC’s maximum financial responsibility throughout the GIP as the LOWER of the final Phase I or Phase II study amounts for network upgrades.

**18. Consider adding a "posting cap" to the PTO’s Interconnection Facilities**

Comments:

SCE wishes to clarify that this item discusses a cap on the amount of interconnection financial security for PTO’s interconnection facilities (a point that could be misunderstood by reading the presentation from the April 28 stakeholder meeting). In the current GIP, the IFS posting amount for PTO interconnection facilities (and distribution upgrades in PTO’s WDATs) are not capped, unlike network upgrades. SCE agrees that the IFS posting amounts should not be changed. ICs that would benefit from such a posting cap should be in the very small minority of interconnection requests. As a result, such a cap would have narrow need and a change is not justified by real-world experience in the cluster study process.

**Work Group 5**

**19. Partial deliverability as an interconnection deliverability status option.**

Comments:

The concept of partial deliverability is something that SCE is interested in pursuing from a procurement standpoint. However, SCE continues to have technical concerns over the CAISO's deliverability assessment methodology that won't necessarily be alleviated by the addition of a partial deliverability option, and which might actually be aggravated by partial deliverability. SCE also expects that the CPUC will have to weigh in very soon as to whether partial deliverability will count towards RA.

SCE sees an inequity in this partial deliverability proposal that SCE is concerned about. The inequity has been described by others as the "free rider" problem. This free ride comes about because of the "lumpiness" of transmission upgrades that typically creates excess "free capacity" once the delivery network upgrades are completed. The ICs that request Full Capacity Deliverability Status are required to finance the delivery upgrades in order to achieve full deliverability. However, other ICs in the same or subsequent cluster studies that request anything other than FC (such as EO or even partial deliverability) could gain access to that excess "free capacity" without the financial responsibility for the upgrades. According to recent CPUC orders, FC customers are not allowed priority rights to the transmission facilities they have financed ahead of EO or PD customers. The net impact is that available delivery capacity attracts new generation and the new capacity can be eroded away rather quickly. This could have the additional impact of raising energy prices in constrained areas, causing ratepayers to pay double for the energy (once for funding the network upgrades and later for higher congestion).

If the CAISO performed operational deliverability assessments as part of the operational study required for GIP Phase II assessments and identify those upgrades that are required for IRs to be deliverable on a year-by-year basis, SCE would have fewer concerns about implementing a partial deliverability option. The partial deliverability assessment proposal appears to use the outcomes of CAISO Phase I deliverability sensitivities to guide customers in making partial deliverability decisions. Our concern comes from SCE's observation that the CAISO's current method in Phase I studies of observing deliverable capacity without triggered delivery upgrades is really only an estimate and does not, nor should it, bind the outcome of the delivery study for the coming Phase II. The current CAISO practice is to take the highest cost deliverability upgrade out of the Phase I model and re-run the model. Because there are always alternative network solutions, just taking out the highest cost upgrade might not give the planner the best picture of the impacts on the system. SCE's recent experience with these deliverability assessments has shown us that the CAISO's approach can carry a large amount of uncertainty with it, when it is being portrayed as the "definitive answer" of what's required to achieve full capacity deliverability.

For example, the CAISO can give a Phase I estimate of what partial deliverability can be accommodated without delivery upgrades, the IC could reduce its output between Phase I and Phase II to the level it could achieve this partial deliverability without delivery upgrades, but in the Phase II study, the deliverability assessment could still find the delivery upgrades are needed to solve other problems. Or alternatively, in this same example, since there are often multiple network solutions, instead of the delivery upgrades identified in the Phase I study, a different set of delivery upgrades are recommended in the Phase II study. This latest example could lead parties not to look for "better solutions" in the Phase II studies.

20. Conform technical requirements for small and large generators to a single standard

Comments:

SCE agrees with the CAISO's proposal and has no further comments.

21. Revisit tariff requirement for off-peak deliverability assessment.

Comments:

SCE reiterates its earlier comments on the Issues ID paper that depending on the type of resource and local area conditions, the off-peak condition often can be found as the worst case scenario to analyzing real system impact. Most areas in the SCE system where generation projects have been proposed are areas where the most stressed conditions occur at load levels less than 1-in-5 heat storm condition (i.e. the one worst hour over an average five year timeframe). Therefore, on-peak deliverability is by definition inappropriately optimistic if the goal is to assess most likely operational conditions for generation interconnection. It seems imprudent to only use optimistic conditions when assessing the grid impacts of new generation.

Additionally, SCE disagrees with a statement in the Straw Proposal that "the TPP is the appropriate venue to determine the network upgrades needed for off-peak energy delivery" because the TPP does not evaluate all in-queued generation in its deliverability assessments.

22. Annual updating of ISO's advisory course on partial deliverability assessment

Comments:

An operational assessment/study is currently required in each GIP Phase II study. SCE believes that the CAISO's advisory course on "partial deliverability assessment" is really an operational assessment of system deliverability capability and rightly belongs as part of the Phase II study, not as an "advisory" study outside of GIP.

23. CPUC Renewable Auction Mechanism requirement for projects to be in an interconnection queue to qualify

Comments:

SCE reiterates its comments from this and other proceedings that the procurement process should not dictate the terms of the interconnection process, but each should be informed and respondent to the other. CPUC should alter the terms of its RAM and other projects with the arbitrary online-date requirements to reflect reality that the interconnection process takes much longer than 18 months to complete.

**Other Comments:**

1. Provide comments on proposals submitted by stakeholders.

SCE reiterates the points from its straw proposal dated April 12, 2011, that the "post Phase II re-evaluation" is still required even if the CAISO's Item 1 proposal is adopted. This is because changes to the plan of service might occur from licensing/permitting



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activities that could occur well after the execution of GIAs. SCE also reiterates the need for heightened abandoned plant protection for PTOs in the case where PTOs are required to upfront finance network upgrades on a non-voluntary basis.

2. If you have other comments, please provide them here.