### **Stakeholder Comments Template**

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

Submitted by	Company	Date Submitted
Kerry Hattevik Kerry.hattevik@nexteraenergy.com	NextEra Energy Resources	March 11, 2011
510-898-1847		

This template was created to help stakeholders structure their written comments on topics detailed in the February 24, 2011 Issue Paper for Generation Interconnection Procedures 2 (GIP-2) Proposal (at <a href="http://www.caiso.com/2b21/2b21a4fe115e0.html">http://www.caiso.com/2b21/2b21a4fe115e0.html</a>). We ask that you please submit your comments in MS Word to <a href="GIP2@caiso.com">GIP2@caiso.com</a> no later than the close of business on March 10, 2011. For the 21 topics listed below, we ask that you rank each with a score of 0, 1, 2, or 3 in the space indicated (a more detailed description of each topic is contained in the Issue Paper at the link, above).

- 3: For topics that are high priority and urgent.
- 2: For topics that are high priority but not urgent. (i.e., topic could wait until a subsequent GIP stakeholder initiative).
- 1: For topics that have low priority.
- 0: For topics in which "the ISO need not bother."

Stakeholders need not rank or comment on every topic but are encouraged to do so where they have an opinion. The ISO will assume that a stakeholder has "no opinion" on issues for which no rank is provided.

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

#### Comments on Items listed in GIP 2 Issue Paper:

1. Develop procedures and tariff provisions for cost-benefit assessment of network upgrades.

Rank 0-3: 1

Comments:

NextEra supports going through this year's GIP / transmission planning process before embarking on the cost –benefit analysis. If such a process is required it will be a more productive exercise after one year of experience considering network upgrades in the transmission planning process.

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).

Rank 0-3: 2

Comments:

NextEra agrees that clarity about how network upgrades are considered in the transmission planning process is important, but that other issues require more immediate attention.

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

Rank 0-3: 3

Comments:

The network upgrade cost cap provides an incentive to inflate upgrade costs. NextEra supports consideration of ways to mitigate this incentive and provide further scrutiny and transparency to transmission cost estimates.

4. Clarify applicability of GIP for a generator connecting to a non-PTO that is inside the ISO Balancing Area Authority (BAA) and wants to have full capacity deliverability status.

Rank 0-3:

Comments:

No comment.

5. Explore potential modifications to the triggers that establish the deadlines for IC financial security postings.

Rank 0-3: 2

#### Comments:

NextEra supports further clarity. As part of that effort, we suggest further specificity on when final posting amounts are provided to the interconnecting customer and that a timeline is established that provides enough time between when the final posting amounts are delivered and the security posting is due. NextEra has experienced situations where posting amounts were under discussion and the final security amounts were provided with less than a week to post security. Establishing firm timelines for both would be an improvement to the process.

### 6. Clarify definitions of start of construction and other transmission construction phases, and specify posting requirements at each milestone.

Rank 0-3: 1

Comments:

NextEra does not consider this a high priority issue.

#### 7. Clarify ISO information provision to assist ICs.

Rank 0-3: 3

Comments:

NextEra supports additional access to the following set of data: 1) base case information; and 2) updated queue information. The data (i.e. base case load flow) should be provided to the customer upon request as opposed to being directed to a secure web site. The cluster study base case load flow data is necessary to enable interconnection customers to conduct steady state and dynamic analysis. This will allow interconnecting customers to be able to duplicate study results and to optimize the project with regard to impacts to the system.

NextEra strongly opposes the ISO providing guidance on favorable development locations, maps, and any other information on where transmission capacity exists.

#### 8. Consider partial capacity as an interconnection deliverability status option.

Rank 0-3: 0

#### Comments:

NextEra does not see value in providing a resource partial deliverability status. Instead, NextEra supports making more realistic capacity value assumptions in the study process. Currently the CPUC establishes qualifying capacity value for various resource types. For wind and solar resources, these values vary by month (see below). The ISO deliverability assessment should use more realistic qualifying capacity values in the peak and off-peak study assumptions. For example, the deliverability assessment for wind resources in the off peak assumes100% of nameplate when in fact the maximum qualifying capacity for wind in the off peak is 22%. Rather than consider partial deliverability, the better approach is to align the study assumptions for the deliverability modeling with the realistic qualifying capacity values. As it stands, the overly

conservative assumption of capacity value drives up costs and requires network upgrades to deliver more capacity than is commercial from a capacity standpoint.

Solar percentages	2007	2008	2009	Average	Wind percentages	2007	2008	2009	Average
1	0.19%	0.47%	0.33%	0.33%	1	4.86%	12.94%	2.65%	6.82%
2	0.96%	1.16%	16.64%	6.25%	2	12.33%	7.20%	8.96%	9.50%
3	2.80%	6.18%	17.07%	8.69%	3	16.54%	26.62%	23.93%	22.36%
4	42.52%	66.13%	69.73%	59.46%	4	28.65%	16.91%	21.22%	22.26%
5	80.04%	69.42%	70.24%	73.23%	5	31.25%	27.68%	30.21%	29.71%
6	93.07%	97.42%	98.10%	96.20%	6	39.95%	28.16%	34.45%	34.19%
7	92.17%	95.82%	96.90%	94.96%	7	26.05%	23.90%	27.74%	25.89%
8	91.44%	95.00%	89.66%	92.03%	8	20.06%	17.76%	10.68%	16.17%
9	83.33%	87.08%	82.73%	84.38%	9	15.32%	6.10%	5.52%	8.98%
10	36.19%	35.10%	41.97%	37.76%	10	10.59%	5.50%	6.28%	7.46%
11	0.89%	0.11%	2.69%	1.23%	11	6.15%	4.50%	3.84%	4.83%
12	0.45%	2.15%	0.02%	0.87%	12	5.94%	6.31%	1.52%	4.59%

CPUC 2011 Qualifying Capacity Values for New Wind and Solar Resources

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

Rank 0-3: 3

#### Comments:

NextEra strongly supports the ISO adapting the interconnection process to reflect the modular nature of some wind and solar projects. With that said, we recognize the need to establish a strong incentive for developers to be realistic in sizing their projects and bear risk for over-sizing the interconnection. If the partial termination charge is too modest, developers will absolutely be incentivized to oversize the interconnection as an option for increasing their competitive advantage in the procurement process. The price of the partial termination option needs to be high enough that it provides an incentive to realistically size the project and penalize those that cannot execute a portion of the LGIA.

### 10. Provide for partial repayment of IC funding of network upgrades upon completion and commercial operation of each phase of a phased project.

Rank 0-3: 3

Comments:

NextEra strongly supports adopting partial repayment provisions for phased projects.

## 11. Applying Section 25 of the tariff to conversions of grandfathered generating units to compliance with ISO tariff.

Rank 0-3: 3

#### Comments:

NextEra agrees with the ISO that the existing section 25 process is problematic and unworkable. Given our experience, the interconnection process is far preferable given the extremely high risk and lack of interconnection customer rights under the section 25 protocol. For this reason, we support an explicit provision that repowering of existing facilities (primarily QF facilities) should be automatically eligible for the independent

study process. To avoid the pitfalls of the existing section 25 process, we suggest that the ISO detail how it will establish and consider historic transmission utilization. For example, many of these facilities do not have the original interconnection agreements and have had declining production over time. It would be helpful for the ISO to establish a protocol for how it will establish the traditional transmission capacity assumptions and the documentation requirements for these facilities so they receive the benefit of repowering at existing sites.

In addition, while it is helpful if repowers at existing sites can utilize the independent study process, NextEra believes that repowers should be able to get capacity value for the historic amount of capacity. The independent study process does not provide for a deliverability test and therefore a repower would still have to undergo the deliverability assessment in the standard process. This does not make sense for the portion of the interconnection associated with a facility that has historically been in the base cases and operational for many years. Therefore, for the portion of the capacity associated with a grandfathered facility, the developer should not have to undergo a deliverability test.

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

Rank 0-3: 1

Comments:

13. Specify appropriate security posting requirements where the PTO elects to upfront fund network upgrades.

Rank 0-3: 2

Comments:

NextEra agrees that it would be useful to have a tariff provision governing the security requirements in the instance where the PTO agrees to upfront fund upgrades.

14. 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.

Rank 0-3:

Comments:

No comment.

15. Clarify posting requirements for an IC that is already in operation and is applying only to increase its MW capacity.

Rank 0-3: 0

Comments:

NextEra supports security posting for capacity additions that are incremental to an existing facility. NextEra sees no reason to relieve developers of posting amounts.

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

Rank 0-3: 2

Comments:

NextEra supports standardization of the posting amounts.

16. Clarify how GIP applies to storage facilities and behind-the-meter expansion of existing facilities.

Rank 0-3:

Comments:

No comment.

17. Conform technical requirements for small and large generators to a single standard, and develop study methodology to determine voltage impacts pursuant to FERC's 2010 order on ISO's proposed new interconnection standards.

Rank 0-3: 3

Comments:

NextEra strongly supports this effort. We support the power factor requirement being imposed in all asynchronous generators as long as the need is demonstrated in the system impact study. This approach will provide consistency across all resource types and sizes. We also note that the WECC has implemented a similar requirement for all asynchronous generators.

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

Rank 0-3: 3

Comments:

Please see the answer to question 8.

19. Include operational impacts in assessing generation interconnection impacts.

Rank 0-3: 0

Comments:

NextEra strongly opposes this proposal as premature and discriminatory. In addition, neither the conclusion of the GE dynamic transfers operation and reliability study nor the ISO 20% renewable study support this approach. Furthermore, the ISO stakeholder initiative for renewable products and market enhancements is evaluating the operating reserve requirements associated with variable resources and potential cost allocation issues.

20. Revise provisions for transferring queue position to a new IC.

Rank 0-3:

Comments:

#### **Other Comments:**

- 1. Are the five workgroups and their topic areas organized properly?
- Are there other topics that you believe should be considered for the scope of GIP 2?

There are two issues that NextEra would appreciation consideration of in this process.

- a. In other organized markets that have resource adequacy requirements, resources that pay to be fully deliverable and serve as capacity resources, have priority transmission service. Energy-only resources have 'as available' transmission service. In the event that curtailment is required to maintain reliable system operations, the energy-only resources are curtailed first. In the CAISO system, energy-only and full deliverability resources have equal access to transmission service and are equally treated when curtailment is required. Because of this circumstance, LSE's include provisions for curtailment in contract provisions. Resources that pay for the network upgrades to be fully deliverable should have less curtailment risk, which should in turn reduce the risk premium in contracts. As it stands, that is not the case. The ISO should initiate a process to establish a transmission priority definition between energy-only and full delivery so that resource adequacy resources get what they pay for. Establishing the transmission priority has the additional benefit of incentivizing resources to pick the most cost effective option to the benefit of consumers. Developers would determine whether offering a capacity product is cost effective by considering the cost of network upgrades versus the risk of possible curtailment and whether the price received for capacity make sense given that estimation.
- b. NextEra supports clarity regarding application of the independent study process versus the fast track process for projects less than 5 MW. The ISO has maintained that increases of capacity to existing projects (or repowers) that are less than 5 MW are not eligible for the fast track process. Expansion of existing facilities less than 5 MW have to apply for the independent study process or the full interconnection process. It is not clear in the tariff that the fast track process should be limited to new facilities and not applicable to incremental expansions to existing facilities or why a full interconnection process for projects 5 MW or smaller makes sense from an efficiency perspective. While NextEra recognizes the need to guard against perverse incentives and abuse of the rules, we support the ISO having the flexibility to consider specific circumstances to allow for an efficient evaluation of small increases in capacity. One idea is that if an existing facility is already in the base case used for study purposes, an increment above that amount, but less than 5 MW, should be eligible for the fast track process.
- 3. If you have other comments, please provide them here.

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