Stakeholder Comments Template

Subject: Generator Interconnection Procedures
Straw Proposal and Meeting

<table>
<thead>
<tr>
<th>Submitted by</th>
<th>Company</th>
<th>Date Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rob Longnecker and Tam Hunt</td>
<td>FIT Coalition</td>
<td>June 21, 2010</td>
</tr>
<tr>
<td><a href="mailto:rob@fitcoalition.com">rob@fitcoalition.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>415-738-8610</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary

The FIT Coalition is a leading force in bringing Feed-In Tariffs (FITs), promoting the rapid deployment of wholesale distributed generation, and other renewable energy best practices to the United States. The FIT Coalition’s mission is to apply its extensive experience in the renewable energy industry to identify policies that massively scale cost-effective deployments of renewable energy, in a timely fashion, and drive the adoption of these policies throughout the country.

In sum, we strongly object to the ISO proposal to eliminate the SGIP. The ISO proposes to eliminate the SGIP, by collapsing it with the LGIP into a single GIP, in order to address issues that have arisen from a significant increase in the number of small generation projects seeking interconnection to the ISO controlled grid.

On May 26th, 2010, the ISO released a straw proposal that proposed collapsing the SGIP and LGIP into a single streamlined process with one queue cluster per annum and a "best case" process timeline of 420 days, with up to 300 days delay before a developer can even start the process. The only accelerated options available to small developers would be the 2 MW and below “Fast Track” process and a newly proposed “Independent Study Process” (“ISP”), both of which are onerous and extremely difficult to access.

We believe that this Straw Proposal effectively dismantles the reforms envisioned by the original SGIP and runs counter to FERC Order No. 2006, which specifically sought to “remove unfair impediments to market entry for small generators by
reducing interconnection costs and time.” Additionally, we note that the ISO previously stated that any new process would have to be viewed by the FERC as “better and faster” and that the Straw Proposal clearly fails to meet this criterion.

We are also very concerned that if the ISO proposal is implemented, the application process for all projects, including 2 MW and below projects, will be the LGIP application. This requirement is yet another overly burdensome hurdle for smaller projects.

A further critique of the current ISO process is that very little information has been shared with stakeholders about key aspects involved. For example, stakeholders have no idea how many applications the ISO and the IOUs are processing, how long the current process is taking, how many SGIP projects have been interconnected previously, how many Fast Track projects have been interconnected or are in process, what the true cost is to the ISO and the IOUs in processing applications, what the current staffing is at the ISO and the IOUs for processing applications, and other relevant data. We request that such data be shared with stakeholders.

An Update on FITs and Quasi-FITs in California

Feed-in tariffs require that utilities purchase power at a pre-determined price from renewable energy facilities that meet certain criteria. FITs have been shown to tremendously successful in promoting rapid renewable energy deployment in, for example, California during the PURPA era of the 1980s and 1990s, Germany in the first decade of the 21st Century, and China, Spain, Italy, Ontario and about 60 other jurisdictions around the world in recent years. The below figure shows how successful Germany’s FIT has been in comparison to California’s combined solar programs in the last five years. Germany has about twice the population of California, but the solar radiation is far worse:
California has a number of FITs or quasi-FITs either already in place or soon to be in place. These include the current weak feed-in tariff pursuant to AB 1969, and the slightly improved feed-in tariff under SB 32 (2009, Negrete-McLeod), which the CPUC should be implementing later this year, as well as possible additional legislation sponsored by the FIT Coalition: AB 1106 (Fuentes). AB 1106 is a more robust feed-in tariff for projects up to 10 megawatts. Moreover, AB 1613, a cogeneration feed-in tariff for facilities 20 megawatts and under, has recently been implemented by the CPUC and is the subject of two declaratory order proceedings at the Federal Energy Regulatory Commission (EL10-64 and EL10-66).

Moreover, the recently approved IOU PV programs, totaling 1,000 megawatts over five years for PG&amp;E and SEC, and another 77 megawatts for SDG&amp;E’s pending program, will provide substantial opportunities for wholesale distributed generation (“WDG”) over the next five years. WDG is generation that is built close to load and interconnects to the distribution system (though the term is sometimes used for facilities interconnecting to the transmission grid also). These new programs are quasi-feed-in tariffs because they lack a pre-determined price. Rather, developers must bid into a reverse auction process and allow the IOUs to select the winning bids.

This model is the same auction model proposed for the CPUC’s own feed-in tariff proposal, known as the Reverse Auction Mechanism (“RAM Proposal”). This is also, accordingly, a quasi-feed-in tariff because it lacks the guaranteed price of a true feed-in
tariff. The RAM Proposal has no state-wide capacity limitation and will likely allow projects between 3 and 20 megawatts to bid into the system.

These programs, combined, will provide significant capacity additions over the coming years. We estimate up to 3,000 megawatts over the next five years from SB 32, AB 1106 (if passed into law) and the IOU PV programs. The RAM Proposal may result in significant additional capacity in coming years.

There are also a number of smaller projects coming online or proposed for the RPS program, SCE’s Standard Offer program (20 megawatts and below) and other IOU programs, that will expand the state-wide portfolio of WDG in coming years.

All of these programs combined could lead to 10,000 megawatts or more of new WDG, a very substantial amount of new generation. This will be interconnected on both ISO-jurisdictional and IOU-jurisdictional lines. A major advantage of the 20 MW and below market for renewables is the streamlined interconnection process – which will be eliminated if the ISO proposal is implemented.

CPUC President Peevey said, on April 22, 2010, in approving PG&E’s 500 megawatt ground-mounted WDG solar PV program: "This solar development program has many benefits and can help the state meet its aggressive renewable power goals. Smaller scale projects can avoid many of the pitfalls that have plagued larger renewable projects in California, including permitting and transmission challenges. Because of this, programs targeting these resources can serve as a valuable complement to the existing Renewables Portfolio Standard program."

Another very significant concern is that the IOUs have historically used SGIP changes in their own WDAT procedures, leading to the conclusion that the new ISO proposal for SGIP will lead to similarly negative changes in the IOUs’ WDATs. This would be even more damaging to the renewable energy industry than the proposed SGIP changes.

In sum, there will be a large amount of 20 MW and under renewable energy projects connected to the ISO grid and WDG projects connecting to the IOU grid coming online in the coming years, weighing heavily in favor of improving the SGIP and related WDAT processes – not eliminating the SGIP and making it even harder to interconnect.

---

1 Online at: [http://docs.cpuc.ca.gov/PUBLISHED/NEWS_RELEASE/116816.htm](http://docs.cpuc.ca.gov/PUBLISHED/NEWS_RELEASE/116816.htm).
to the ISO system. The ISO proposal, if implemented, will do much to moot the benefits of programs like PG&E’s solar PV program, and others like it, because it leads to many of the same “transmission challenges” that Peevey cites above.

Preserving the SGIP

While the FIT Coalition recognizes that the SGIP process is currently overwhelmed, we don’t understand why the ISO hasn’t first attempted to fix the existing process – rather than dismantling it. While it is difficult to discuss fixing the existing SGIP without input from the ISO and the IOUs, the FIT Coalition believes that the following steps would have a far more positive impact on the SGIP process than the current ISO proposal:

- Increasing staff or external consulting contracts at the ISO;
- Increasing staff or external consulting contracts at the IOUs;
- Providing more support in the early stages of the study process in order to rapidly flag incomplete requests, cluster-sensitive projects and other information that could help a developer decide whether or not to push a request forward without expending substantial funds and potentially wasting a lot of time;
- Improving the availability of interconnection data to developers, which would likely improve the quality of projects in queue and reduce wasted effort by the ISO and IOUs; and
- Imposing stricter timeline rules for the ISO, the IOUs and developers.

Streamlining the ISO Proposed Process

While the FIT Coalition firmly believes that the SGIP should not be abandoned without attempting to fix the process as discussed above, we provide below additional comments on the new process described in the Straw Proposal.

ISO staff have informed us that the normal SGIP timeline is about nine months. While no official data has been given on how long the current process is taking, IOU statements in working group meetings seem to indicate 350 to 400 days – significantly longer than nine months. Assuming this information is correct, the Straw Proposal timeline of 420 days, but up to 720 days for a project that just misses the queue window (which assumes that the 420 day timeline does not slip further, as is often the case for
current projects) is not an improvement. To be entirely clear: the SGIP process was originally envisioned as taking less than a year for completion; the ISO staff proposal now suggests that the SGIP process, collapsed into a new GIP process, will take up to two years, or perhaps more. This is unacceptable. Not only is it counter-productive to make all these changes for little or no timeline improvement, but such an outcome would conflict with comments made early in this process by the ISO that any new process would have to be viewed by the FERC as “better and faster.”

ISO Template Questions

Proposed Independent Study Process

1. Do you think that the proposed independent study process criteria are appropriate?

The Independent Study Process (“ISP”) is entirely unworkable for developers because the bar is set so high by the many enumerated criteria. It is, accordingly, not at all helpful in reducing the damage that would be done to the current SGIP process if the ISO proposal is implemented.

As a general rule, developers will not develop a project to the point required by the ISP criteria before seeking interconnection. Instead, it’s the opposite order: interconnection is one of the first tasks initiated by developers. This is the case because developers need to know two key things about interconnection early in their development process: 1) whether interconnection is achievable and how long it will take; 2) what it will cost to interconnect. There is almost no situation in which a developer will proceed to the point of having ordered equipment for a project (criterion (e)) and THEN seek interconnection. This is to put the cart before the horse.

More specifically, the proposed ISP will not work at all for the new IOU solar PV programs if those projects are interconnected to the ISO grid or if the proposed SGIP “reforms” are adopted in the IOU WDATs. This is the case because a developer literally cannot meet criteria (c) and (d):

- c) The customer is able to demonstrate an executed contract (or comparable evidence) for the sale of electrical energy or capacity from the proposed generating facility by a date certain; and
- d) The project has obtained all regulatory approvals and permits needed to begin construction, or the customer makes a reasonable demonstration
of expectation that the approvals and permits will be obtained before the end of the annual cycle.

The solar PV programs require that the developer have an interconnection study under way before they can bid into the system. This is, thus, a classic Catch-22: a developer can’t qualify for the ISP because it doesn’t have a PPA in place and it can’t bid for a PPA because it doesn’t have an interconnection study under way – at least not under the ISP, which is proposed as a “fix” for the catastrophic elimination of the SGIP.

As one developer, Solar Power Development Partners, shared with the FIT Coalition: “[This is] devastatingly bad compared to [the] present SGIP process. This is really awful for 3-20MW solar farms.”

One way to “remove unfair impediments to market entry for small generators” would be to increase and expand access to the existing 2 MW and below “Fast Track” process (for example allowing up to 5 MW for Fast Track projects) and the proposed ISP. In terms of the Fast Track process, our conversations with developers and comments made during this reform process lead us to believe that very few projects have successfully accessed this program but – again – this data has not been shared with stakeholders. As discussed above, we request this data and more feedback from the IOUs to determine why the Fast Track process does not seem to work and what changes could be made.

2. How should the proposed independent study process be specifically modified to incorporate desired features that are in the current SGIP serial process?

The FIT Coalition would support the GIP and ISP proposal if the ISP criteria were heavily modified; that is, if the ISP were modified to be applicable to any 20 MW and under project that meets the Rule 21 requirement of supplying 15% or less of the relevant sub-station’s capacity, and 30% or less for solar power. Black & Veatch and E3, consultants to the CPUC, have worked closely with the ISO in calculating how much potential there is to interconnect with the existing grid without upgrades. In a new analysis, E3 found the potential for 9,257 MW of WDG solar PV projects, as the below

---

2 We are aware that Rule 21 only applies strictly to IOU-jurisdictional lines, but the point remains the same because the part of Rule 21 we are citing is the substation capacity limit, and this applies to both IOU and ISO-jurisdictional lines.
figure shows ("easy-to-interconnect" are those projects that meet the modified Rule 21 requirement of 30% or below of a substation’s capacity):  

<table>
<thead>
<tr>
<th>Hard-to-Interconnect</th>
<th>Easy-to-Interconnect</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Mounted (&gt;30% of peak load)</td>
<td>Ground Mounted (&lt;30% of peak load)</td>
<td>Large Rooftop</td>
</tr>
<tr>
<td>9167</td>
<td>2350</td>
<td>3671</td>
</tr>
<tr>
<td>18424</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This solar potential can contribute very substantially to meeting the state’s ambitious RPS and greenhouse gas reduction mandates. It should, accordingly, be encouraged, not discouraged, as is the case with the current ISO proposal. **We propose, therefore, that the ISP proposal be modified to include the additional qualifying criterion:**

(h): Developers may also use the ISP instead of the GIP if the proposed project is found to supply 15% or less of a substation’s capacity for all technologies other than solar, and 30% or less for solar. The previous criteria, (a) through (g), do not apply to projects that fall into this category.

3. **How can the independent study criteria be modified to allow PTOs to utilize this process if they do not have a backlog and waiting for the cluster window does not make sense?**

See last response.

4. **What pre-application information and guidance is needed to prequalify projects so that the process is not overwhelmed with applications?**

As we suggest above, one of the first things that should be done to improve the SGIP is to hire more staff to handle the new influx of applications. If the proposed ISP is “overwhelmed,” this itself would be evidence that ISO had not sufficiently staffed the program.

5. **How much “ISO and PTO judgment” should be allowed in qualifying projects and how should it be delineated?**

The FIT Coalition has no response to this question at this time.

---

3 Online at: [http://www.cpuc.ca.gov/NR/rdonlyres/A0CBE958-E2C4-4AC7-9D56-3AB4D14D723D/0/BVE3PVAssessment.ppt](http://www.cpuc.ca.gov/NR/rdonlyres/A0CBE958-E2C4-4AC7-9D56-3AB4D14D723D/0/BVE3PVAssessment.ppt)
6. **What would be sufficient transparency into the ISO and PTO judgment process in qualifying projects and how would that be provided?**

The FIT Coalition has no response to this question at this time.

7. **If the proposed independent study process is included in the final proposal, is there still a need for the current LGIP Phase II accelerated study process?** (CAISO Tariff Appendix Y Section 7.6)

The FIT Coalition has no response to this question at this time.

### Proposed Study Deposit Amounts

Are the proposed study deposit amounts appropriate, if not please explain?

The FIT Coalition has no response to this question at this time.

### Proposed Cluster Study Process

Do the proposed timelines for the cluster study process seem reasonable? Please add explanations for both yes or no responses?

The FIT Coalition has no response to this question at this time.

### Coordinating generator interconnections with the transmission planning process

Do you support the concept of coordinating the proposed generator interconnection process with the transmission planning process, why or why not?

The FIT Coalition has no response to this question at this time.

### Deliverability Assessments

1. What are your thoughts on the proposed alternatives for deliverability assessments?
2. What adjustments should be made to each alternative?

The FIT Coalition has no response to this question at this time.

### Proposed Transition Plan
1. Do you think that the proposed transition plan is reasonable for LGIP projects?
2. Do you think that the proposed transition plan is reasonable for SGIP projects?
3. Do you have any comments on the proposed dates for grandfathering projects in queue and migration of new projects and in queue projects into the proposed cluster process?

The FIT Coalition has no response to these questions at this time.

Do you have any additional comments that you would like to provide?

**Additional Comments**

Given the broad implications of this reform, we believe that there are several open issues that should be addressed as soon as possible in future ISO stakeholder initiatives:

*Wholesale Distribution Access Tariffs (WDATs)*

The FIT Coalition is extremely concerned that the changes made in this process will be adopted by IOUs into their WDATs, thereby creating further impediments for small generators who are disproportionately impacted by the timelines and costs in the WDAT. While this has not been discussed formally in this proceeding, several IOU representatives have referred to a connection between the GIPs and WDATs and historically the IOUs have tended to adopt changes made in SGIP and LGIP reforms into their WDATs.

As such, the current SGIP reform process will very likely lead to a *de facto* reform of the WDAT process as well. **We believe that the WDAT is too vital to be reformed *de facto* and without an official stakeholder process that includes input from interested parties.** Many interested parties, such as industry groups, WDG developers, consultants and others, may not realize that the current SGIP process could ultimately be highly relevant to their operations. As such, we believe a formal process should be implemented to discuss potential changes to WDATs.

Additionally, we believe that generation closer to load (typically distribution-connected generation) is more efficient than transmitted generation and that simply aligning SGIP/LGIP and WDATs fails to reward the preferred outcome of distribution-connected generation.
Interconnection visibility

We believe that increasing interconnection visibility could substantially reduce the pressures currently impacting the SGIP. Specifically, the FIT Coalition recommends mandating that transmission capacity for all IOU substations be shared with the public. Clearly, the more detail provided in the interconnection data, the more efficient the process becomes for developers, the IOUs and the ISO.

A good example of how to provide interconnection data can be seen in the reports that the Ontario Power Authority (OPA) has made available to support their FIT program. OPA provides easy access to two reports that enable prospective project developers to analyze the feasibility of interconnecting projects at specific substations and distribution feeder lines. The first report shows the capacity of all substations and feeder lines on their distribution network. The second report shows all allocated capacity at each substation and feeder line. Ontario utilities are required to update the reports weekly. In order to access this data, a developer only has to register at the OPA’s feed-in tariff web page.