

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Amendment to Wholesale Distribution Tariff:
Generator Interconnection Procedures

Docket No. ER11-03004
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CLEAN COALITION PROTEST TO
PG&E WDT AMENDMENT

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Pursuant to Rules 212 and 214 of the Federal Energy Regulatory Commission's (the "Commission" or "FERC") Rules of Practice and Procedure, 18 C.F.R. §§ 385.212 and 385.214 (2009), and the Commission's Notice of Filing dated March 2, 2011, the Clean Coalition moves to protest the tariff filing submitted in the above-captioned docket by Pacific Gas & Electric ("PG&E").

The Clean Coalition is a California-based entity that advocates for feed-in tariffs, wholesale distributed generation ("WDG") and other smart renewable energy policy solutions in California, Washington D.C. and other jurisdictions around the United States. The Clean Coalition is part of Natural Capitalism Solutions, a 501(c)(3) based in Longmont, Colorado, and founded by Hunter Lovins.

We submit these comments to the Commission in an attempt to highlight the importance of streamlining interconnection for 20 megawatt and smaller renewable energy projects, per clear Commission guidance on this issue, and the fact that the PG&E Wholesale Distribution Tariff Amendment ("Amendment") would instead impose additional obstacles to interconnection by increasing, potentially dramatically, the time and expense required for interconnecting 20 megawatt and smaller renewable energy projects. Moreover, the Clean Coalition fears that the supplemental interconnection procedures (Fast Track and Independent Study Procedure) offered by PG&E to ameliorate the impacts of eliminating the WDT SGIP represent little more than "false hopes" because they will not be viable and accessible to most developers.

We also note a major concern about process. PG&E made a number of substantive changes to its Amendment in between the stakeholder process and

its Commission filing. In light of these substantive changes, it is not accurate for PG&E to claim that it has vetted its proposal with stakeholders. The Clean Coalition was optimistic that we would be able to support PG&E's Amendment. Upon reviewing the Commission filings, however, we noted the major changes since the stakeholder process and decided that we could not support the Amendment.

I. INTRODUCTION AND SUMMARY

The Clean Coalition would like to support PG&E's proposed WDT Amendment, but we unfortunately can't, for a variety of reasons. PG&E has been more receptive to stakeholder comments than SCE in its similar stakeholder process and we acknowledge PG&E's adjustments in some key areas, including changing the mandatory Fast Track 2 MW limit to an advisory limit up to 5 MW; dramatically improving interconnection data maps, allowing for elimination of the previously available feasibility study; changing ISP from a once a year option to a year-round option; and elimination of any screens for the Independent Study Procedure other than electrical independence.

We also recognize a number of benefits from shifting to a cluster study process instead of a serial process like the current WDT SGIP, including: increasing cost certainty; eliminating the need for re-studies (though it is unclear how common a problem this is because no data has been shared on this issue); sharing upgrade costs with other interconnection customers in the same cluster; and allowing for full capacity deliverability for all interconnection customers.

However, the large majority of the Clean Coalition's detailed suggestions in the stakeholder process have gone unheeded by PG&E, despite the fact that we have

been intimately involved with CAISO's and PG&E's interconnection reform procedures for the last year.

The crucial underlying problem, which we have highlighted repeatedly over the last year, is that PG&E's proposed cluster process as the default for distribution grid interconnections is far too long for most developers. PG&E, similar to SCE and CAISO before it, disingenuously claims that the cluster study process is 330 days from start to finish – a dramatic further reduction from the previously claimed 420 days (which is the number CAISO claims for the full cluster study timeline).¹ Both of these numbers are drastically wrong. The 330-day timeline is the idealized timeline for the Phase I and Phase II studies alone. It does not include the 90 day period between Phase I and Phase II, which must be considered part of the timeline. More importantly, PG&E also does not include the waiting period for the Phase I study to begin, up to 14 months, which is a necessary consequence of switching from a serial process to a cluster process because only one cluster is conducted per year.

The waiting period to start the cluster study process will be from two to 14 months, for an average of eight months. We must also include up to 30 days for the scoping meeting after Phase II. We have, then, the 330 days described by PG&E plus 90 days of waiting between Phase I and Phase II plus about 240 days (eight months) plus 30 days = 690 days as the average study timeline in the cluster process. This does not include the time required for negotiating the interconnection agreement or for construction of any required upgrades, which

¹ Mark Esguerra's testimony (inaccurately) states, with respect to the CAISO cluster process that PG&E seeks to emulate in its WDT (p. 5, emphasis added): "Phase I (including the cluster study, facility cost estimates and schedules, and final study report) takes 134 days, and the results of the Phase I study act as a cap on customers' liability for funding network upgrades. Phase II (including standard project refinement, facilities study and the final plan of service report) takes 196 days, thus a total of 11 months [330 days] for the GIP cluster study process from start to finish."

will add another 6-12 months to the process, bringing the entire average interconnection process timeline to 870 days or 2.5 years. This is, simply put, way too long for most developers, particularly smaller developers.

As a consequence of this extended interconnection timeline under the Amendment, we recommend as a mid-term solution an independent process audit to dramatically reduce the study timelines for CAISO and PTOs. We are optimistic that an independent audit of CAISO and PTO procedures will reveal many areas of improvement, potentially reducing the extended interconnection study timeline dramatically. We believe it is reasonable to expect that two full clusters could be completed per year instead of one.

As short-term solutions, and the focus of our comments herein, we strongly recommend that the Fast Track and Independent Study Procedure (ISP) be made viable alternatives to the overly-lengthy cluster study process. In fact, given the timelines described above, we believe that this Amendment cannot be deemed “consistent with or superior to” the current SGIP process, as required by Commission precedent, unless the Fast Track and ISP are proven to be viable and accessible. Unfortunately, neither Fast Track nor ISP is viable as PG&E has proposed them.

This is the case because the revised Fast Track procedure has a “poison pill” in the form of uncapped cost liabilities for future distribution grid and transmission grid upgrades – with no temporal limit on this uncapped cost. Moreover, Fast Track interconnection applications will almost always require a supplemental review and Facilities Study, due to changes PG&E has made to Fast Track in its Amendment (after the stakeholder process). No cost information or timeline for the Fast Track Facilities Study is provided in the Amendment. Moreover, if an interconnection customer navigates through the Fast Track process and hits an

obstacle at any point before the end, it will be forced into the ISP or cluster study process (with substantial additional fees then required) and will have, as a consequence, wasted significant time and funds on the attempted Fast Track process, with nothing to show for its efforts.

The ISP, a serial process available for projects that are electrically independent from other interconnection applications, contains no objective criteria for determining electrical independence.² Objective criteria are necessary to allow developers to have information, before they expend substantial funds in applying for ISP, as to whether their ISP application will succeed or not. Additionally, without objective criteria there is essentially no way for applicants to appeal PG&E's determinations if required. CAISO's tariff provides objective criteria for its ISP and it is unclear why PG&E cannot follow suit.

Moreover, PG&E's proposed tariff itself suggests that the ISP will almost never be available because section 4.8.1 of the proposed GIP suggests that all distribution grid requests will "generally" be studied in one cluster due to electrical inter-relatedness throughout the distribution grid. Last, no timelines for ISP studies (System Impact Study and Facilities Study) are described in the proposed tariff or attachments, leaving an unacceptable void for information that developers will need before applying for ISP as an alternative to the cluster process.

The Clean Coalition urges the Commission to be proactive in reviewing PG&E's Amendment and to require a number of changes before acceptance, per our recommendations below. In particular, we recommend that PG&E be required to:

² Neither the Amendment nor the supporting testimony contains any detail whatsoever as to how PG&E will determine electrical independence.

- Provide substantially more data about its interconnection procedures than has been provided to date, including the number of Fast Track applications received and the number successfully processed under Fast Track
- Agree to conduct an independent process audit to review in detail all PTO interconnection study procedures, staffing and software – this is key to reducing the time required for the way-too-long cluster study process. This audit will ideally be conducted in concert with CAISO, but it is not necessary that CAISO be involved
- Include all fees and timelines in the GIP itself, not in attachments
- Eliminate the 10th Fast Track screen entirely, emulating CAISO in this regard, but preserve the section 2.4 supplemental review option for any facilities likely to require any interconnection facilities or distribution upgrades
- Eliminate the Fast Track facilities study option and instead include any Fast Track interconnection costs in the proposed interconnection agreement offered to interconnection customers after the supplemental review is completed
- Study expanding Fast Track Screen 2's 15% of peak load limit in order to allow larger projects to qualify for Fast Track
- Add objective criteria for creating cluster study boundaries on PG&E's distribution grid and remove GIP section 4.8.1's suggestion that all distribution grid interconnection requests will "generally" be studied in one cluster due to electrical relatedness, because if this is the case how will any projects qualify for ISP as electrically independent?
- Add objective criteria in each reference in the draft tariff to "engineering judgment," in order to add transparency and predictability to what would

otherwise be opaque and unappealable aspects of the interconnection process

- Improve queue transparency to provide more data and deadline tracking, ensuring that the interconnection process is transparent and that tariff deadlines are being met by PG&E

II. THE AMENDMENT IS NOT “CONSISTENT WITH OR SUPERIOR TO” TO THE WDT SGIP, AS IS REQUIRED

The Commission’s standard of review for considering PTO interconnection tariff revisions is more stringent than that for ISOs like CAISO. The Commission re-confirmed this matter in its recent conditional approval of CAISO’s GIP Proposal (133 FERC ¶ 61,223, Dec. 16, 2010, p. 25):

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

The Commission reaffirmed in the same order that Order No. 2003 requires any proposed changes to SGIP to be “consistent with or superior to” the WDAT SGIP.³

³ 133 FERC ¶ 61,223, p. 24 (quoting Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at P 26, 827).

The Clean Coalition asserts that the Amendment is not “consistent with or superior to” the current WDT SGIP for the various reasons discussed in this protest. The manner in which the Commission approved the CAISO GIP Proposal highlights a serious flaw in the Commission’s regulatory process. In particular, by allowing the CAISO GIP Proposal to be approved under a relatively unstringent standard of review – because the CAISO is an independent entity – the PTOs can argue (and are now arguing⁴) that their proposals simply conform to CAISO’s changes. If the Commission accepts this argument on its face it essentially allows the PTOs to achieve major interconnection changes under the “independent entity” standard of review, which is entirely inappropriate. We strongly recommend, as a remedy to this underlying problem with Commission regulatory procedures, that the Commission exercise stringent review of PTO interconnection reform proposals.

III. THE WDT REFORM PROCESS REMAINS DATA-STARVED

The CAISO and PTO interconnection reform procedures continue to be data-starved despite the Clean Coalition’s repeated requests for more data. PG&E has provided some additional data during its stakeholder process, and we are appreciative of this. However, much additional data is still required for stakeholders and regulatory agencies like the Commission to diagnose the problem or, at the least, determine whether solutions proposed by PTOs are

⁴ PG&E argues in Mark Esguerra’s testimony (p. 3): “Given the CAISO’s recently implemented GIP Tariff Amendment (“CAISO’s GIP”), PG&E finds that it must modify its WDT SGIP and WDT LGIP to parallel the CAISO’s GIP.” And at page 4: “The study processes for interconnection requests to PG&E’s distribution system and PG&E’s CAISO-controlled transmission system must be coordinated in order to achieve the greatest level of efficiency in interconnections to both systems. Keeping the study processes under both PG&E’s and the CAISO’s tariffs distinctly independent would likely create insurmountable inefficiencies and comparability issues. Therefore PG&E proposes to mirror the CAISO’s GIP as closely as possible to ensure that the two processes provide equal and consistent terms for open access to PG&E’s transmission and distribution systems.”

acceptable solutions. Here is a list of the information we feel should be available to all stakeholders before major changes are made to WDT:

- Number of WDT applications in the PG&E queue, with dates of entry
- Number successfully processed, time for processing and costs of studies
- Number of Rule 21 applications in the PG&E queue, with dates of entry
- Number successfully processed, time for processing, and costs of studies
- Number of Fast Track applications in the PG&E queue, with dates of entry
- Number successfully processed in Fast Track, time for processing and costs of studies. Information on rejected Fast Track applications, including specific screen that was failed (if relevant).
- Number of PG&E staff working on interconnection issues, staff added in the last two years, planned staff additions over the next two years
- Actual cost to PG&E of feasibility studies, system impact studies and facilities studies for all interconnection queues, with methodology for determining actual costs
- Cost of required upgrades for each project or cluster (PacifiCorp, for example, posts all of this information online as soon as it is completed)

A good model for data availability is the California Solar Initiative program, which shares comprehensive data about every facet of the program each quarter. Any new PG&E interconnection process should provide substantially more data, similar to the above list, so that the interconnection process is auditable in the future and not the black box we have today.

IV. THE COMMISSION SHOULD REQUIRE THAT CAISO CONDUCT A THIRD PARTY AUDIT OF ITS INTERCONNECTION PROCESSES AS A MID-TERM SOLUTION

a. The cluster study timeline should be audited to identify improvements

Unfortunately, the draft PG&E tariff envisions a cluster study process that will take on average 690 days, assuming that suggested time lines are met (which may not happen, leading to even further delay), as follows:

- November 15: close of first cluster window
- March 31: close of second cluster window (which will be the first window in 2011 only)
- June 1: Phase I study commences, to be completed within 134 days. Study results meeting to be held within 30 days of study conclusion.
- January 15: Phase II study commences, to be completed within 196 days. Study results meeting to be held within 30 days of study conclusion.
- Total Phase I and Phase II study time: about 450 days
- But: the average wait time for GIP Phase I will be 240 days (from two months to fourteen months, for an average of about 240 days), depending on the time of year the application is submitted. For example, an applicant submitting on the last day of the March cluster window will wait two months until June 1 and the beginning of the Phase I study. An applicant ready to submit April 1 (the worst-case scenario) will wait fourteen months until June 1.
- Accordingly, 240 days plus 420 days study plus 30 days waiting for a meeting to discuss results. Total average study time: 690 days.

These figures don't even include time required to negotiate the Generator Interconnection Agreement or the time required to construct any necessary upgrades, which will add another 6-12 months to the interconnection process.

An average timeline of nearly two years just to get to the point of negotiating an interconnection agreement is far too long for small or new developers to hold on to projects without knowing if the chosen site is economically viable (due to not knowing the interconnection costs) because options must be paid to landowners, at the least, and the biological study and permitting process is unlikely to start in earnest until the full costs of interconnection are learned in the cluster study process. This is the case because of the possibility that such activities would be mooted if the project could not be interconnected at a reasonable cost.

Due to the unconscionably lengthy cluster study process just described, the Clean Coalition urges the Commission to require PG&E to conduct a process audit as part of the next stage of its interconnection reform and submit a report to the Commission detailing the findings. This audit should form the basis for a multi-year improvement in interconnection procedures, with lessons learned to be disseminated to other PTOs, ISOs and RTOs around the country.

On its face, the length of time interconnection studies take in most jurisdictions around the country seems extreme, particularly given the fact that private consultants can perform detailed load flow analyses in a matter of hours. The interconnection study process is admittedly highly complex and should not be unduly rushed. But to suggest, as the PTOs and CAISO have done, that there are not very significant areas of potential improvement, which could be identified by a third party process audit, is to hide from the optimal solutions to the current queue backlog. It does not seem unrealistic to the Clean Coalition, given the dramatic increase in computing power in recent years and concomitant software

improvements that a revamping of PTO and CAISO interconnection processing procedures could result in dramatically reduced study times.

As a specific example for improvement, holding four cluster windows per year and two full cluster studies per year would result in half the number of projects studied in each cluster compared to an annual cluster process. By improving staffing levels, software, and other procedures, it seems entirely reasonable to expect that two full cluster studies (Phase I and Phase II) could be conducted by CAISO and the PTOs each year. This would reduce the proposed cluster study process timeline by half. It is only through an independent audit, however, that the Commission, CAISO, PTOs and stakeholders will learn whether these kinds of improvements are feasible.

If the Commission is reluctant to condition its approval of PG&E's proposal on an independent audit, we request that the Commission direct the appointment of an Independent Evaluator for all aspects of PG&E's interconnection procedures. The Independent Evaluator would observe the PG&E processes and provide regular analysis and commentary to the Commission and stakeholders.

b. Objective criteria for creating cluster study boundaries on PG&E's distribution grid should be added to the GIP

The Amendment does not describe in an objective manner how cluster boundaries will be determined on PG&E's distribution grid. Objective criteria should be added to the tariff. Determining the boundaries of each distribution grid cluster is very important for a number of reasons, including: 1) it will determine which projects share in interconnection costs; 2) it will determine how many other projects are studied in each cluster; and 3) most importantly, it will

determine whether a project can proceed in the ISP as a “cluster of one,” and avoid the lengthy cluster study process entirely.

We are worried, in particular, by PG&E’s GIP section 4.8.1, which provides some guidance on this issue (emphasis added):

Study Groups will be determined using engineering judgment as to electrical relatedness. Generally, all Interconnection Requests in a given Cluster Application Window that are interconnecting at the distribution feeder level (less than 60kV) up to and including interconnections to the lower-voltage side of the point of demarcation between the Distribution System and the ISO grid will be included in the same Study Group.

This provision seems to eliminate any chance for the ISP as an interconnection option because of literally all interconnection requests will “generally” be included in the same study group there can be no determination of electrical independence, the only criterion for ISP. We strongly urge the Commission to require that PG&E and other PTOs include objective criteria for determining cluster boundaries – that don’t automatically result in a single cluster for all distribution grid interconnection requests. Including objective criteria will allow developers to have some foreknowledge of the clustering process and whether or not their projects will qualify under ISP. Having objective criteria will also provide some means for appealing PTO decisions if this becomes necessary.

V. PG&E’S PROPOSED FAST TRACK PROCEDURE IS VERY LIKELY UNUSABLE AND THUS WILL NOT MITIGATE THE IMPACTS OF THE CLUSTER STUDY DEFAULT PROCESS

We must first raise a process concern with respect to the Amendment. Very substantial changes to the draft GIP Fast Track procedures were made after the

stakeholder process was completed. The Clean Coalition was initially optimistic, based on PG&E's previous draft and public statements, that we would be able to support the Amendment. However, in reviewing the Amendment documents filed with the Commission, and noting the substantial changes made between the Amendment and PG&E's most recent draft tariff from January 14, 2011, we realized that we cannot support PG&E's Amendment. If PG&E and other PTOs are to hold legitimate stakeholder processes, it is not productive for PTOs to make substantial changes after completion of the stakeholder process and then claim that they have vetted proposed changes with stakeholders. This is patently not the case for a number of major changes in the Amendment, of which stakeholders taking part before PG&E's Commission filing will have no knowledge.

We also note that no fees are listed for the Fast Track procedure in the proposed GIP. All fees and timelines should be included in the GIP itself for clarity, consistency and simplicity. Some guidance for various GIP aspects is included in attachments to the GIP, but we strongly recommend that all costs and timelines be included in the GIP itself.

- a. PG&E should be required to emulate the CAISO's Fast Track procedure by eliminating Screen 10 and including interconnection costs in the interconnection agreement**

Mr. Esguerra's testimony suggests the difficulty with PG&E's proposed Fast Track process is PG&E's notion that Fast Track should be available only for projects having "no impact" on the distribution system (p. 14, emphasis added): "PG&E believes that the Fast Track Process provides a valuable benefit to small generators whose interconnections will have no impact to the PG&E distribution system or the CAISO Grid by permitting them to interconnect at the distribution

level more quickly and through a more streamlined process than would be possible under the standard Interconnection Study Process.”

The Clean Coalition believes, to the contrary, that Fast Track should be available for projects that have minimal impact on the grid – instead of “no impact.” The Fast Track screens are designed to filter out those projects that have excessive impacts on the grid.

There is also a significant discrepancy between Mr. Esguerra’s testimony and the Amendment. The Amendment requires a supplemental review if any facilities are required for interconnection. Section 2.2.1.10, the 10th Fast Track screen, requires that: “No construction of facilities by the Distribution Provider on its own system shall be required to accommodate the Generating Facility.” Section 2.3.3 of the GIP Amendment clarifies that “facilities” includes interconnection facilities as distinct from “distribution” or “network” upgrades (emphasis added):

If the proposed interconnection fails the screens due to Screen 2.2.1.10, and no Distribution Upgrades or Network Upgrades are required (i.e., only interconnection facilities are required), then the Interconnection Customer shall have the option to move into the Independent Study Process, or Cluster Study Process, as applicable, or move forward to Supplemental Review.

Mr. Esguerra states, however (pp. 15-16):

The proposed amendment defines a specific set of criteria for which the 10th screen may not be passed, but PG&E believes that once a supplemental review is completed, the generator may be connected without being subject to a study process. Therefore, under the proposed amendment if the interconnection request fails to meet the “no PG&E-constructed facilities” screen but PG&E believes that no distribution or transmission upgrades are required, the

generator may continue in the Fast Track Process subject to confirmation via a supplemental review.

Mr. Esguerra does not include in his testimony the additional requirement in the Amendment that interconnection customers agree to a Facilities Study after the supplemental review, to determine the costs of interconnection (2.4.1.1 of the GIP Amendment). Additionally, the Amendment contains no guidance on the cost of the Fast Track Facilities Study for interconnection customers or timelines for completion.

Moreover, no guidance is offered for timelines or costs of the supplemental review. PG&E's transmittal letter suggests that the supplemental review will require only an additional ten days, but the Amendment's proposed GIP Section 2.4 is silent on these issues, stating only that the interconnection customer shall have 15 business days to consent to a supplemental review once it is offered. No timeline for when PG&E must offer the supplemental review is included. Section 2.4 also states that the interconnection customer must make a deposit for the supplemental review and will be responsible for all actual study costs. Yet no dollar figures are supplied for the deposit and no estimates are provided for the actual costs.

The end result of these additional requirements – generally added to PG&E's tariff version submitted to the Commission after the stakeholder process was finished – is that literally all Fast Track interconnection customers will have to go through a supplemental review (because all customers will require at the very least interconnection facilities, if not distribution or network upgrades) and, if customers are to avoid facing further unknown and substantial costs by waiving the Facilities Study, also go through a Facilities Study process. And yet no costs or timelines are described in the tariff for the Facilities Study.

This is a recipe for the same kind of backlogs we've witnessed in recent years under the WDT SGIP.

Last, if the end result is that the interconnection customer opts out of the Fast Track process the customer will have wasted substantial time and money, with nothing to show for its efforts, and will be forced into the ISP or cluster process – which come with their own far larger fees. In sum, while PG&E seems to have sincerely tried to expand and improve its Fast Track process, it has in doing so imposed additional onerous requirements that will make the Fast Track process unusable for a very small number of customers. This outcome further highlights the problems with the overly-lengthy cluster process and the lack of viable alternatives.

The Clean Coalition recommends as a solution that PG&E simply remove the 10th screen, as CAISO did in its reform process. Further, PG&E should eliminate the optional Facilities Study and emulate CAISO in this respect also, including instead any required upgrades costs in the interconnection agreement offered to the customer. The CAISO's October 19, 2010, GIP transmittal letter to the Commission stated (pp. 22-23, citations omitted and emphasis added):

With respect to the requirement that no construction facilities by the participating transmission owner on its own system be required to accommodate the small generating facility, this screen is proposed to be eliminated because the ISO does not believe it is appropriate to restrict the Fast Track Process simply because minor network modifications to participating transmission owners' facilities may be required. Rather, as discussed above, the ISO is proposing to amend the Fast Track Process provisions to provide that if the proposed interconnection passes the screens and upgrades are reasonably anticipated, the interconnection customer will be provided with the opportunity to attend a customer options meeting. 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 are needed to permit the proposed small generating facility to be connected safely and reliably. The further steps may include a supplemental review of the proposed small generating facility. If transmission upgrades are ultimately determined to be required, then the applicable participating transmission owner shall provide an interconnection agreement to the customer for execution which sets forth the costs associated with the necessary upgrades.

By including interconnection cost estimates in the interconnection agreement itself, the lack of cost and timeline guidance in the Amendment will both be solved. This is the case because no charges will be imposed on interconnection customers for the interconnection agreement's facilities' cost estimate (beyond that already required for the Fast Track application and supplemental review) and the Amendment already contains a timeline for PG&E to submit the interconnection agreement to the interconnection customer (2.4.1.1 requires that the agreement be forwarded within 15 business days).

PG&E's transmittal letter to the Commission states (p. 8, emphasis added):

If a generator in the Fast Track process requires interconnection facilities, a supplemental review and an optional facilities study will be added to the process. This change will accommodate new facilities that previously would not have qualified for Fast Track study treatment. This change also offers Fast Track interconnection customers the option to find out their interconnection facility cost information prior to signing an interconnection agreement."

This is an accurate but misleading statement because including the interconnection costs in the interconnection agreement, as we propose, will also allow the interconnection customer to know costs before signing the agreement as the agreement does not need to be signed immediately (there appears to be no deadline for signing the agreement in the draft tariff).

b. PG&E's proposed Fast Track includes a late-added "poison pill"

Perhaps more importantly than the issues just described, PG&E's proposed Fast Track includes a "poison pill" that was also added after the stakeholder process ended. In other words, stakeholders taking part in PG&E's process prior to the March 2, 2011, filing with the Commission have no idea that this poison pill was included in the Amendment. In particular, sections 2.2.2, 2.2.3 and 2.4.1.1 include the following language imposing potentially unlimited cost liabilities on Fast Track customers, with no temporal limit for cost liability:

Interconnection Customer retains financial responsibility for any Interconnection Facilities, Distribution Upgrades, or Network Upgrades determined by subsequent engineering or study work, such as final engineering and design work, or other future operational or other technical study, such as to identify and determine the cost of any Distribution Provider's Interconnection Facilities required by the Generating Facility, or of short circuit duty-related Reliability Network Upgrades as assigned to the Interconnection Request during the Cluster Study Process as set forth in Section 4, that are attributable to the Interconnection Request. If future engineering or other study work determines that the Interconnection Customer is financially responsible for Interconnection Facilities, Distribution Upgrades, or Network Upgrades identified in these future studies, the GIA will be amended to assign the Interconnection Customer financial responsibility for such facilities and upgrades.

The large majority of Fast Track interconnection customers will be unwilling to accept uncapped cost liabilities in perpetuity (no cost liability temporal limit is included by PG&E) and it is unreasonable for PG&E to expect them to.

The Clean Coalition strongly recommends that the Commission require PG&E to remove this poison pill from all three places it appears and, instead, make it clear that costs for Fast Track interconnection customers are limited to those described

in the supplemental review, the optional Facilities Study (if this remains in PG&E's final tariff) or the interconnection agreement (if the Commission adopts our recommendation to require that PG&E include interconnection costs in the interconnection agreement instead of an optional Facilities Study).

c. The Commission should require PG&E and other PTOs to study revising Fast Track Screen 2

The Clean Coalition and others have raised various issues around this screen, which acts as a key barrier to the size of Fast Track projects, including:

- Discussion of how a screen based on minimum load may be more accurate and appropriate
- Discussion of how the screen should take into effect the positive attributes of solar generation and other peak renewable energy resources
- Questions about the origins of the current screen's 15% of peak load limit and how rigorously that standard has been studied and tested

We also recommend that PG&E work with the CPUC and other utilities to analyze changes to Screen 2 more generally. As we've mentioned in previous comments to PG&E, Black & Veatch's wholesale DG analysis for the CPUC used a 30% peak circuit load limit instead of 15%, after consulting with the utilities, including PG&E, as a way to estimate total resources for solar PV. The rationale is that solar PV is a peak resource so it should be accommodated at far higher percentages than the highly conservative 15% limit because maximum circuit load will often coincide with solar output. PG&E and SCE have, however, indicated no interest in modifying this screen without further study so we urge the Commission to require that PG&E and other PTOs engage in further study of this key issue.

VI. PG&E's PROPOSED ISP ALSO HAS MAJOR FLAWS

As mentioned above, the Clean Coalition appreciates that PG&E has, along with the CAISO and SCE, proposed to eliminate any criteria for the ISP other than electrical independence. However, this remaining screen remains highly problematic. The lack of objective criteria for determining what projects will be able to access the ISP make the ISP option highly uncertain. Developers should be able to refer to objective criteria rather than PG&E's "engineering judgment." More specifically, three sections are of concern to us:

- Section 3.1.1.1. What does it mean for a project to be "of sufficient MW size, in the engineering judgment of the Distribution Provider, to be suspected of having potential impacts to the ISO grid"?
- Section 3.1.1.2 What does it mean that the Distribution Provider will use "engineering judgment to determine whether an Interconnection Request being evaluated for electrical independence on the Distribution System has to wait for the completion of studies of queued Generating Facilities to which the Interconnection Request is electrically related in order to be eligible for the ISP"?
- Section 4.8.1. This section was discussed in Section IV.b above and seems to preclude ISP an interconnection option from the outset. This is the case because PG&E states that it will "generally" include all distribution grid interconnection requests in a single cluster. This section, combined with the above sections re "engineering judgment" provide us with zero confidence that the ISP will be a viable option for the large majority of interconnection customers

We have previously requested that PG&E address these screens in a more objective manner in an effort to remove subjectivity from the interconnection procedures as much as is possible – and we request the same of the Commission now. The grid itself is not a subjective system. It is a physical and objective system and is modeled with software simulations. Accordingly, it seems that any judgments about electrical independence should be made using objective criteria instead of undefined and subjective engineering judgment. Applying objective criteria will make interconnection smooth for all parties because interconnection customers will have a better handle on what locations to look for and can develop their own tools as a pre-screen; PG&E will benefit by reducing the number of ISP applications that fail the electrical independence screen.

As with the Fast Track procedures, a number of key costs and timelines are omitted from the ISP. In particular, section 3.5.4 omits any mention of costs for the System Impact Study (SIS) or any timelines for the SIS or Facilities Study (FS), referring instead to the SIS Agreement (SISA) attached to the GIP. The SISA, however, does not include any costs or timelines. Rather, it includes an “escape clause” allowing PG&E discretion to delay completion of studies (section 9.0 of the SISA, p. 171 of the Amendment’s GIP, emphasis added): “An Interconnection System Impact Study, if required, shall be completed and the results transmitted to the Interconnection Customer within sixty (60) Business Days after this Agreement is signed by the Parties, or in accordance with the Distribution Provider's queuing procedures.” This underlined phrase is a recipe for a backlog similar to what exists in today’s WDT SGIP and we recommend that PG&E remove this phrase.

As we’ve noted above, all costs and timelines should be included in the GIP itself for the sake of clarity, consistency and simplicity. Section 3.2.1 provides that customers must submit \$50,000 plus \$1,000 per megawatt as an ISP application

study deposit, but additional detail should be provided with respect to the likely costs of the SIS and FS. Section 3.5.6 provides that PG&E will give a “binding good faith estimate” of FS costs to the interconnection customer, but provides no guidance as to what these costs are likely to be. Section 3.6.4 refers to an attachment that contains the “scope of any cost responsibilities of” the FS, but this is also not the case.

The net result of these omissions is that the ISP has no real deadlines to ensure that it will be any faster than today’s WDT SGIP or the proposed cluster study process, undermining the intent of the ISP as an alternative to the overly-lengthy cluster process.

Section 3.7 seems to contain vestigial references to a Commercial Operation Date requirement for ISP customers. The COD screen was, however, eliminated by PG&E, so it seems that this section should also be eliminated.

VII. QUEUE TRANSPARENCY SHOULD BE IMPROVED FOR THE BENEFIT OF DEVELOPERS AND PTOS

The Clean Coalition is a strong proponent of increased transparency in the interconnection process. In addition to grid transparency, we are advocates for better queue transparency, which refers to an expansion of the information made available by the IOUs on their interconnection queues. We stress that all this information is already known to the utilities, but they have previously chosen not to release it to the public. We believe that this lack of data and, in particular, the lack of data provided by SCE during the WDAT reform stakeholder process, is one reason why SCE’s stakeholder process has resulted in such poor solutions to the backlog problem. The need for more queue transparency is especially

pertinent if we assume that any revised WDAT tariff will not be perfect and will likely be revisited and refined in future stakeholder processes. In fact, any new SCE interconnection process should provide substantially more data so that the interconnection process is auditable in the future and not the black box we have today.

We therefore ask the Commission to direct SCE to expand its online queue information to include these additional items for each project:

- date application deemed sufficient,
- date of scoping meeting,
- date of system impact study,
- date of facilities study, and
- date of results meeting

Additionally, information should be provided on each project that fails to clear an Accelerated Option (Fast Track or ISP) and the specific reason for that failure. This information should also be provided for all utility-owned projects that participate in projects like the utilities' Solar Photovoltaic Programs (SPVP), which are new utility programs for commercial-scale solar.

Additionally, all study results should be posted online to provide more information to all parties involved in the interconnection process. As we have noted multiple times in earlier comments to SCE and others, PacifiCorp provides links to actual System Impact Studies and Facilities Studies in their publicly-available interconnection queue:

<http://www.oasis.pacifiCorp.com/oasis/ppw/lgia/pacifiCorplgiaq.htm>

VIII. WHOLESALE DISTRIBUTED GENERATION IS A MAJOR NEW MARKET NICHE THAT WILL BE IRREPARABLY DAMAGED IF THE AMENDMENT IS APPROVED IN ITS CURRENT FORM

Developers, policymakers, and policy advocates, have been advocating for expansion of the 20 MW and smaller renewable energy market (wholesale distributed generation or “WDG”) in large part because of the existing interconnection process advantage presented by the SGIP and WDAT tariffs. If the Commission approves the Amendment in its current form, many years of advocacy and planning may well be lost, as well as the hopes of many developers who have pursued a business model that relied on the SGIP and WDAT procedures.

The Clean Coalition hopes the Commission sees the importance of the Amendment – as a major detriment, if approved in its current form, or potentially a major boost if dramatically improved – for the WDG market niche. The great promise of the WDG market niche for meeting California’s renewable energy, climate change and employment goals is a final, hopefully persuasive, issue weighing heavily in favor of the Commission’s substantial modification of the Amendment, as described in previous sections of these comments.

IX. TYPOGRAPHICAL ERRORS

Section 2.4.1.1 of the GIP includes an extra "if" on line 5. There is also an extra "an" in the second paragraph second line.

Section 3.5.8 of the GIP contains an extra "and" in the line third from last.

Respectfully submitted,

TAM HUNT

A handwritten signature in black ink, appearing to be 'TH' followed by a long horizontal stroke.

Attorney for:

Clean Coalition

16 Palm Ct

Menlo Park, CA 94025

Dated: March 23, 2011

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing document to be served electronically according to Rule 385.2010(f) of the FERC's Rules of Practice and Procedure.

Dated at Santa Barbara, California, this 23rd day of March, 2011.

A handwritten signature in black ink, appearing to read 'TH' followed by a long horizontal stroke.

Tamlyn Hunt

Appendix A: Clean Coalition final comments to PG&E on draft WDT amendments

Clean Coalition (formerly FIT Coalition) comments on PG&E GIP draft tariff

**ROB LONGNECKER, POLICY ANALYST FOR CLEAN COALITION
TAM HUNT, J.D., ATTORNEY FOR CLEAN COALITION**

March 23, 2011

I. INTRODUCTION

The Clean Coalition appreciates this chance to provide comments on PG&E's proposed WDAT/GIP tariff revision ("draft tariff"). We also appreciate some of the changes that have occurred already during this stakeholder process. That said, we believe significant additional changes are required before PG&E's proposed tariff will pass muster with FERC. We provide detailed comments in this document but we have also redlined the draft tariff and included various comments in that document. In summary, we request that PG&E:

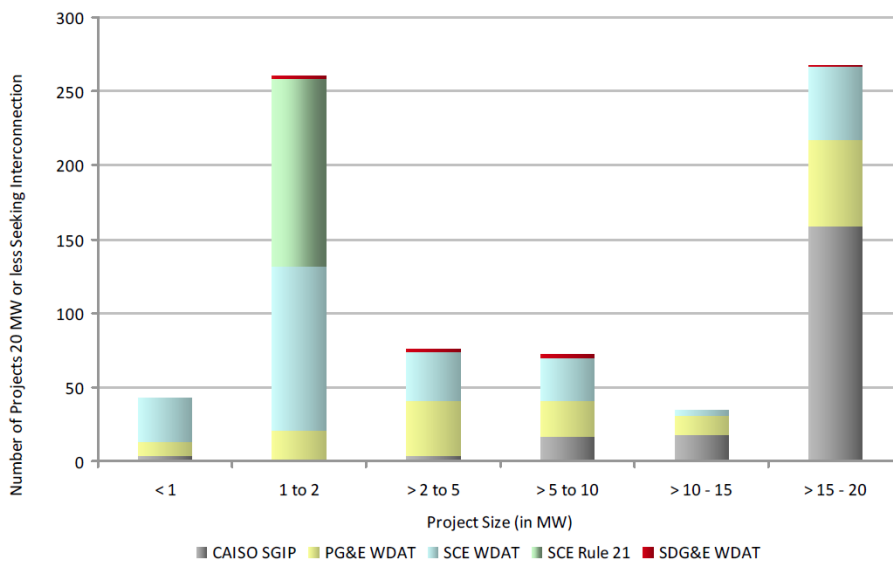
- Provide substantially more data about their interconnection procedures than has been provided to date
- Add flow charts for the entire interconnection process and for each major component, including Fast Track and the Independent Study Process (ISP)
- Change the tariff title to "Distribution Grid GIP"
- Change all days to "Calendar" days as the default, for simplicity
- Change the MW caps for Fast Track from mandatory to advisory because the Fast Track screens already serve the purpose of capping the capacity of each project

- Examine the feasibility of IREC’s suggested approach of using minimum circuit loads for Fast Track’s screen 2, where data is available, and examine the costs of adding SCADA to all circuits
- Modify section 2.2.10 so that it may be passed if only interconnection facilities are required, because almost all projects will require new interconnection facilities
- Include timelines for ISP study phases in the GIP tariff itself (instead of other documents), so that all relevant timelines are contained in the tariff
- Clarify section 4.8.1’s suggestion that all distribution grid interconnection requests will “generally” be studied in one cluster due to electrical relatedness, because if this is the case how will any projects qualify for ISP or Fast Track as electrically independent?
- Add objective criteria in each reference in the draft tariff to “engineering judgment,” in order to add transparency and predictability to what would otherwise be opaque aspects of the interconnection process
- Improve grid transparency to provide more information to developers outside of the cluster study process (this change appears to be in process as PG&E improves its online mapping tools)
- Improve queue transparency to provide more data and deadline tracking, ensuring that the process is transparent and deadlines are being met
- Improve pre-application exchange of information through a for-fee feasibility study
- Last but definitely not least: Agree to an independent process audit to review in detail PG&E’s interconnection study procedures, staffing and software – this is key to reducing the time required for the way-too-long cluster study process.

We agree that there is a need to improve PG&E’s current interconnection process to handle the backlogged WDAT/SGIP/Rule 21 queue and we recognize and

appreciate a number of improvements between PG&E’s WDAT reform principles, discussed at a workshop on December 13, 2010, and the draft tariff released in January by PG&E. We note, however, that by far the largest backlog appears to be in the SCE queue, based on information contained in the CPUC’s most recently quarterly RPS report (see figure).⁵ PG&E’s own data, presented at the December 7, 2010, workshop, suggested that there are 127 active interconnection requests and 41 withdrawn projects in its queue. And it appears, when combining the CPUC report with PG&E’s data that practically all requests filed since 2008 are still active, highlighting the problem with current procedures.

Figure 5. Allocation of Projects 20 MW and Less Seeking Interconnection (2008-2010)¹¹



Regardless of how severely backlogged PG&E’s queue is, we feel that PG&E and the other Investor-Owned Utilities (IOUs) continue to assume that the development cycle for 20 megawatt and under energy projects follows a similar development cycle as that for larger projects, in which interconnection costs are simply accepted as a significant part of project costs and the project itself is

⁵ http://www.cpuc.ca.gov/NR/rdonlyres/CFD76016-3E28-44B0-8427-3FAB1AA27FF4/0/RPSQuarterlyReporttotheLegislatureQ4_2010.pdf.

driven by concerns about location, not transmission. For smaller projects, this is, in actuality, reversed: interconnection costs are often a major issue and interconnection analysis must be conducted at the beginning of the development cycle, not the end, to address economic viability early on. If interconnection costs are significant, the project will generally not be viable, so this must be known as early in the process as possible.

Unfortunately, the draft PG&E tariff envisions a cluster study process that could take up to 840 days, assuming suggested time lines are met (which may not happen, leading to even further delay), as follows:

- November 15: close of first cluster window
- March 31: close of second cluster window (which will be the first window in 2011 only)
- June 1: Phase I study commences, to be completed within 134 days. Study results meeting to be held within 30 days of study conclusion.
- January 15: Phase II study commences, to be completed within 196 days. Study results meeting to be held within 30 days of study conclusion.
- Total study time: about 450 days
- BUT: the total interconnection study process time, as an AVERAGE will be 180 days (from 0 to 365 days, for an average of about 180 days) waiting for Phase I to begin, depending on the time of year the application is submitted, plus 420 days study plus 30 days waiting for a meeting to discuss results. Total AVERAGE time: 630 days.
- IN ADDITION: if the second cluster window is missed, the applicant must enter the next first cluster window and wait until June 1 of the following year for Phase I to begin. So if a party is ready to go on April 1 (the worst case scenario), it must wait until Oct. 15 to submit its application in the first cluster window and then until June 1 of the next year for Phase I to start, January 15 of the next year for Phase II to start, and then 226 days for the meeting to discuss Phase II results. Total WORST CASE duration is 28 months or about 840 days!
- And this doesn't even include time negotiating the Generator Interconnection Agreement or the time required to construct any necessary upgrades.

An average timeline of nearly two years just to get to the point of negotiating an interconnection agreement is far too long for small or new developers to hang on to projects without knowing if the chosen site is economically viable because options must be paid to landowners, at the least, and the biological study and permitting process is unlikely to start in earnest until the full costs of interconnection are learned in the cluster study process due to the possibility that such activities would be mooted if the project could not be interconnected at a reasonable cost.

II. SOLUTIONS

We suggest a number of solutions, both immediate and mid-term, below.

A. Flow Charts

We request that PG&E include flow charts, with timelines and explanations of abbreviations, akin to, but expanded from, the charts included as an Appendix to the Jan. 25, 2011, PG&E presentation, for the following: 1) An overview of the entire interconnection study procedure, encompassing the cluster study process, ISP and Fast Track; 2) the cluster study process; 3) ISP; 4) Fast Track. Flow charts will make understanding PG&E's procedures far easier and save both developers and PG&E a lot of time. The Appendix contains just timelines and we urge PG&E to expand these basic timelines to flow charts with relevant data summarized in each chart.

B. Tariff Title

The Clean Coalition also requests that PG&E entitle the GIP tariff the “Distribution Grid GIP,” in order to distinguish it from the CAISO GIP.

C. Data Transparency and Process Improvements

While we acknowledge that the current serial process is flawed, very little “behind the scenes” data has been provided to help understand where the problems lie, how those problems can be addressed and what areas exist for future improvement, despite our numerous requests for more data. For example, would software and modeling improvements fix much of the delay? How about additional staff? (We note that a PG&E representative stated on PG&E’s January, 2011, conference call: “We have a backlog that we’re addressing with additional staff.” As such, it is clear, as the Clean Coalition has been suggesting for many months now, that additional staff will indeed improve at least part of the backlog issue). Could improved software, with more staff and a cluster process dramatically improve the proposed reforms and allow studies to be completed in far less than 420 days? At this point, we can’t say because we have so little information.

Here is a list of the kinds of information we feel should be available to all stakeholders before major changes are made to WDAT:

- X. Number of WDAT applications in the PG&E queue, with dates of entry
- XI. Number successfully processed, time for processing and costs of studies
- XII. Number of Rule 21 applications in the PG&E queue, with dates of entry
- XIII. Number successfully processed, time for processing, and costs of studies

- XIV. Number of Fast Track applications in the PG&E queue, with dates of entry
- XV. Number successfully processed in Fast Track, time for processing and costs of studies. Information on rejected Fast Track applications, including specific screen that was failed (if relevant).
- XVI. Number of PG&E staff working on interconnection issues, staff added in the last two years, planned staff additions over the next two years
- XVII. Actual cost to PG&E of feasibility studies, system impact studies and facilities studies for all interconnection queues, with methodology for determining actual costs
- XVIII. Cost of required upgrades for each project or cluster (PacifiCorp, for example, posts all of this information online as soon as it is completed)

If this information becomes publicly available, it would be possible to have a robust stakeholder process whereby participants could analyze data and suggest far more informed solutions. Given that other, similar information requests from the Clean Coalition have been gone unanswered in both this and the ISO process, we can only assume that this request too will also go unanswered. However, at a minimum, we ask PG&E, and the ISO and other IOUs, to conduct a thorough outside review of its interconnection procedures in order to identify areas for improvement.

Additionally, we believe that PG&E and the other IOUs should retain an Independent Evaluator similar to that used in SCE's SPVP program. We believe that the presence of an Independent Evaluator in the interconnection process could substantially ease the concerns of smaller developers and ensure that the WDAT process is: 1) constantly evaluated for adherence to stated procedures; 2) assessed for incremental improvements; and 3) is communicated clearly to all stakeholders.

D. Broader improvements to the current stakeholder process

As described above, PG&E's proposed cluster study has an average timeline of 630 days and is therefore substantially inferior to the current WDAT timelines. Accordingly, the proposed tariff appears to violate FERC requirements that reforms result in a WDAT that is "consistent with or superior to" existing procedures. In order to create a WDAT draft tariff that would be deemed acceptable by FERC, we believe that the following changes must be incorporated:

- Shorten the cluster study process considerably
- Improve Accelerated Options, such as Fast Track or the Independent Study Process (ISP), so they can be accessed by a substantial percentage of smaller developers
- Improve grid transparency to provide more information to developers outside of the cluster study process (this change appears to be in process as PG&E improves its online mapping tools)
- Improve queue transparency to provide more data and deadline tracking, ensuring that the process is transparent and deadlines are being met
- Improve pre-application exchange of information
- Agree to an independent process audit to review in detail PG&E's interconnection study procedures, staffing and software. It is our hope that such a process will eventually allow two full cluster studies to be completed each year, which would allow for all of the benefits of cluster studies to be realized, with none of the downsides.

It is important to note that FERC's standard of review for considering IOU tariff revisions is more stringent than that for ISOs like CAISO. FERC re-confirmed this

regulatory point in its recent conditional approval of CAISO's GIP Proposal (133 FERC ¶ 61,223, Dec. 16, 2010, p. 25):

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

Fast Track improvements

As discussed above, we believe that the long timelines associated with PG&E's proposed cluster study process will only be acceptable to FERC if the cluster study process is accelerated and/or the Fast Track and the ISP (Accelerated Options) can be accessed by a substantial percentage of smaller developers. The Clean Coalition appreciates PG&E's decision to expand the Fast Track from the original proposed limit of 2 MW up to 5 MW for some lines. However, we discuss below additional refinements which we believe would further improve the Fast Track process.

MW caps as advisory limits

As we noted in PG&E's January, 2011, conference call, we urge PG&E to make the MW cap limits advisory and not mandatory. In other words, rather than

limiting applicants to these MW caps for each type of PG&E distribution line, we request that PG&E revise the tariff language to make it clear that these MW caps are only advisory “rules of thumb.” As such, they will act as guidance to applicants in setting expectations but won’t act as a hard limit beyond the Fast Track screens themselves, which PG&E’s engineers have noted on many occasions are the real limiting factors. As advisory limits, the MW caps will still act as a gatekeeper of sorts and limit applicants from submitting projects that clearly won’t qualify for Fast Track. Moreover, many developers have interconnection consultants or their own modeling software that provides them with a reasonably accurate idea of how many megawatts can interconnect at each location without upgrades. And PG&E’s proposed steps towards increased grid transparency will further increase the quality of Fast Track applications. By making the MW caps advisory only, developers will not be artificially limited and will be incentivized to build out the distribution grid in such a way that maximizes its potential for ratepayers. If developers can find locations that would permit a 5 MW solar project on a 12 kV or 21 kV line without upgrades, an artificial cap should not limit this project from qualifying for Fast Track.

On the specific issue of 12 kV interconnections, PG&E has raised concerns about rural line loads and the need to maintain a 2 MW limit. However, it is our understanding that these concerns are generally only relevant to interconnections far from substations and are less relevant within one mile of a substation. We ask that PG&E address this issue and consider increasing the 12 kV limit to 3 MW for interconnections within one mile of a substation, whether or not the MW caps are mandatory or advisory.

Screen 2 improvements

On Screen 2, we remain unclear as to why review of this screen appears to be “off the table” in this reform process. To summarize, we and others have raised various issues around this screen, including:

- Discussion of how a screen based on minimum load may be more accurate and appropriate
- Discussion of how the screen should take into effect the positive attributes of solar generation and other peak renewable energy resources
- Questions about the origins of the 15% screen and how rigorously that standard has been studied and tested

The Clean Coalition supports IREC’s suggestion to use minimum loads for Screen 2, instead of maximum loads. However, we acknowledge that PG&E does not have minimum load data for most circuits, so at this time we encourage PG&E to examine the costs of adding SCADA to all circuits in order to collect more grid information and to permit the change that IREC suggests.

We also recommend that PG&E work with the CPUC and other utilities to analyze changes to Screen 2 more generally. As we’ve mentioned in previous comments, Black & Veatch’s wholesale DG analysis for the CPUC used a 30% peak circuit load limit instead of 15%, after consulting with the utilities, including PG&E, as a way to estimate total resources for solar PV. The rationale is that solar PV is a peak resource so it should be accommodated at far higher percentages than the highly conservative 15% limit because maximum circuit load will often coincide with solar output. PG&E and SCE have, however, indicated no interest in modifying this screen without further study so we urge PG&E to engage in further study with alacrity.

Screen 10 improvements

We also appreciate PG&E's efforts to address the issue of Screen 10, which we believe has been the main factor in making the current Fast Track effectively inaccessible to new development projects in PG&E territory. Anecdotally, we understand that SCE has been using a similar "modified Fast Track" for some time now, resulting in increased numbers of projects clearing Fast Track in their territory. It seems that PG&E's approach is more complicated than required, as nearly all projects are likely to fail Screen 10 and be referred to Section 2.3.2. We encourage PG&E to modify the language of Screen 10 in order to address the specific issue of screening out projects that would require Network Upgrades on the ISO Grid or Distribution Upgrades on the Distribution System. In particular, Screen 10 should be clarified such that "interconnection facilities" will not trigger failure of Screen 10. Practically all projects will require interconnection facilities, so it makes little sense to build across-the-board failure into Screen 10 from the outset. We suggest modified language in the redlined draft tariff.

Despite the importance of Screen 2, especially assuming Screen 10 is reformed appropriately, none of these questions have been addressed in a satisfactory manner. We strongly encourage PG&E to take up this issue.

Independent Study Process

We agree that ISP should be an additional option for developers, but the lack of objective criteria around what projects will be able to access the ISP make the process highly uncertain. Developers should be able to refer to objective criteria rather than PG&E's "engineering judgment." More specifically, two sections are of concern to us:

- Section 3.1.1.1. What does it mean for a project to be "of sufficient MW size to be suspected of having potential impacts to the ISO grid"?

- Section 3.1.1.2 What does it mean that the Distribution Provider will use “engineering judgment to determine whether an Interconnection Request being evaluated for electrical independence on the Distribution System has to wait for the completion of studies of queued Generating Facilities to which the Interconnection Request is electrically related in order to be eligible for the ISP”?

We request that PG&E address these screens in a more objective manner in an effort to remove subjectivity from the interconnection procedures as much as is possible. The grid itself is not a subjective system. It is a physical and objective system and is modeled with software simulations. Accordingly, it seems that any judgments about electrical independence should be made using objective criteria instead of undefined and subjective engineering judgment. This concern is particularly relevant given that the IOUs are increasingly competing with Independent Power Producers for interconnections in programs like the Solar Photovoltaic Programs (SPVP), giving rise to at least the appearance of a conflict of interest that needs to be mitigated.

Cluster study process

We urge PG&E to clarify section 4.8.1’s suggestion that all distribution grid interconnection requests will “generally” be studied in one cluster due to electrical relatedness, because if this is the case how will any projects qualify for ISP or Fast Track as electrically independent?

Section 4.6 makes reference to Business Days and Section 4.7 refers to Calendar days. There are other occurrences like this in the tariff and we request that PG&E standardize its “days” as either Calendar days or Business days throughout the document – it’s confusing to have different types of days used in

different places, with some “days” left unspecified as to whether they are Calendar or Business days. This standardization should be done in a manner that does not extend the existing timelines.

Grid transparency

We were greatly encouraged by comments from PG&E employee John Carruthers regarding interconnection data on the Jan 25, 2011, stakeholder call. Mr. Carruthers indicated that PG&E intends to provide the following information via a Google Maps format or equivalent:

- Access to specific circuit voltage, circuit capacity, circuit loading information (including peak load) and the amount of distributed generation already on that circuit
- Access to that same information by substation bank
- Ideally, information on what projects are in queue by circuit or substation

We request that PG&E release this substantially improved online distribution grid map available as soon as possible.

Queue Transparency

As the Clean Coalition has mentioned previously, PG&E’s reform process has been data-starved, which impairs any stakeholder process and makes it difficult to accurately diagnose the problems and suggest optimal solutions. We request that PG&E proactively provide more data going forward. Additionally, we believe it is vital to understand whether or not the Accelerated Options are working appropriately and this can only be done by rigorously tracking each project and making this data public. Specifically, the online queue information

should be expanded dramatically and we request inclusion of these additional items for each project: date application deemed sufficient, date of scoping meeting, date of feasibility study, date of system impact study and date of facilities study. Additionally, information should be provided on each project that fails to clear an Accelerated Option and the specific reason for that failure. This information should also be provided for all IOU-owned projects that participate in projects like the SPVP.

We note that the FERC provided similar commentary in its recent conditional approval of CAISO's GIP Proposal (133 FERC ¶ 61,223, Dec. 16, 2010, p. 31):

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.

We also encourage PG&E to increase the flow of information by posting the results of scoping meetings and system impact and facility studies, with information redacted where necessary. We believe this would cut down on multiple interconnection applications in areas where expensive upgrades would be required. For an example of a utility providing such information, please visit PacifiCorp's interconnection queue:

<http://www.oasis.pacificorp.com/oasis/ppw/lgia/pacificorplgiaq.htm>.

Pacificorp shares a substantial amount of more general interconnection data also, as part of its participation in FERC's OASIS program:

<http://www.oasis.pacificorp.com/oasis/ppw/main.htmlx>.

Pre-application exchange of information

In PG&E's Key Reform Principles document circulated on December 13, 2010, PG&E indicated that the long timelines of the proposed cluster study process could be ameliorated by Accelerated Options and "pre-application exchange of information to assist Interconnection Customers in the applications process." We believe this exchange of information should be formalized with a "for fee" feasibility study, available anytime to developers of projects 20 MW and below. This would allow a developer to get an early read on a project and determine whether the project merits entering the proposed WDAT cluster process or a different option. The feasibility study would provide one more level of additional detail, above and beyond what is made publicly available per our previous suggestion. Information provided in the feasibility study would not be definitive, by any means, because cost projections can change dramatically from the feasibility study through the end of the facilities study process. However, having relatively easy access to feasibility studies, combined with ready access to up-to-date online interconnection data, would help developers make decisions about potential projects without wasting a lot of money and time.