BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Consider Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21.	Rulemaking 17-07-007 (Filed July 13, 2017)

CLEAN COALITION COMMENTS ON ORDER INSTITUTING RULEMAKING TO CONSIDER STREAMLINING INTERCONNECTION OF DISTRIBUTED ENERGY RESOURCES AND IMPROVEMENTS TO RULE 21

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I. INTRODUCTION

The Clean Coalition submits these comments in response to the *Order Instituting Rulemaking to Consider Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21* (OIR), dated July 13, 2017.

The Clean Coalition is broadly supportive of inclusion of both the topics listed in the OIR and the separation of these topics into discrete tracks. However, several previously identified topics of high significance are missing from the proposed scoping, and we strongly urge their inclusion:

- Clearly defined goals and direction, a "roadmap" for the future of interconnection.
- Automation to support of streamlining of processes and results.
- Consistency of practices, especially regarding income tax component of contribution (ITCC) treatment.
- Cost review, especially regarding Cost of Ownership charges.
- Use of existing and planned facilities, and associated cost responsibility.

- Standardization of common charges based on categorical averages.
- Use of alternate approved providers for timely and more cost effective construction of required facility upgrades.

We further recommend that topics be initially assessed for mutual dependencies, impact and urgency, and estimated time and effort to address each such that a schedule can be developed reflecting these factors.

The Clean Coalition greatly appreciates both the work done by the California Public Utilities Commission (Commission) staff on this topic to date and the opportunity to offer comments on this the scope and structure of this proceeding.

II. DESCRIPTION OF THE PARTY

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources (DER)—such as local renewables, advanced inverters, demand response, and energy storage—and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

III. COMMENTS

A. Key issues left unresolved from the previous interconnection proceeding

The Clean Coalition greatly appreciates the Commission's proposed scoping and efforts to build upon the thoughtful prior contributions of Energy Division staff and Parties. The OIR and proposed initial scoping for this proceeding appropriately recognizes the broad DER Action Plan goals and, in particular, the need for streamlined interconnection processes identified both by parties in the prior proceeding (R. 11-09-011) and in the Commission's Guidance in the development and implementation of Distribution Resource Plans (DRP) proceeding (R.14-08-013).

Six years ago, the Commission opened R. 11-09-011 on its own motion to improve distribution level interconnection rules and regulations. The Commission convened parties in an intensive settlement process to address critical issues as quickly as possible. Parties responded and worked diligently to achieve a successful settlement on procedural changes in the tariff and additional critical issues to be urgently addressed. In the following years, substantial progress was made as reflected in D.14-12-035, and D.16-06-052, which enhanced the Rule 21 Pre-Application Report, created a Unit Cost Guide, established a pilot cost certainty option, and addressed behind-the-meter electric storage interconnection. Expedited dispute resolution is additionally currently being addressed in response to legislation.

Nevertheless, additional issues significantly impacting interconnection applicants remain unresolved (due to time constraints at the conclusion of the prior proceeding) and continue to arise as unprecedented quantities and uses of DER proliferate to meet the evolving needs of individual customers, grid operators, wholesale markets, and broad ratepayer interests.

The Commission clearly recognized this in opening this proceeding. The Clean Coalition broadly supports the inclusion of both the topics listed in the OIR and the separation of these topics into discrete tracks. Several significant topics previously identified in Status Reports and Joint Party Motions[1] are, without explanation, absent from the proposed scoping. These include the need for clearly defined goals and direction for the future of interconnection, automation of processes, consistency of practices, cost review, use of existing and planned facilities, standardization of fees, and the use of alternate providers; we address these in the following sections.

[1] See Report submitted to the ALJ Bushey at the August 6, 2015, Status Conference, and Appendix C '*Unaddressed Issues in the Rule 21 Proceeding*' included in the November 18, 2015 '*Joint Motion Supporting Revisions to Streamline Rule 21 for Behind The-Meter, non-exporting Storage Devices*', submitted in accord with the August 19, 2015, Administrative Law Judge's Ruling Setting Dates for Filing Final Motions and Granting Motions for Party Status.

1. *Need for a Roadmap*

This proceeding would greatly benefit from a clear statement of vision and long-term goals related to interconnection. Other areas of statewide policy development and implementation have benefitted from coordinated long-term vision and goals clearly expressed in 'Roadmaps' related to Energy Storage, Demand Response & Energy Efficiency, Distribution Resources Plans, Electric Vehicle-Grid Integration, and current Micro-grid Commercialization. While the Commission has put forth a broad DER Action Plan, long-term goals specific to the interconnection process have not been published.

What should a "streamlined interconnection process" look like? What specific goals is it trying to achieve? Each party may have variations on the answers to these questions, including our own long-term vision of a highly-automated application and review process to provide instant results and tools to support project design and grid optimization. Issues such as this do not necessary require a Rule 21 Tariff amendment, but do profoundly impact project feasibility assessments, study processes, and potentially applicant costs, timeframes, and overall experience. The Commission and stakeholders made major steps to improve interconnection by developing the Integration Capacity Assessment (ICA) and directing its use in the interconnection process, in conjunction with online applications, and these developments are coordinated toward a clear goal. Developing a clear interconnection vision and roadmap would assist all parties in identifying the steps needed to reach these goals and evaluating the options and schedule for achieving them. It helps to agree on where we are trying to go as we discuss how best to get there.

2. *Replacement and Recovery Charges (Cost of Ownership)*

The cost-of-ownership charge is typically a one-time charge that establishes a fund to cover a utility's on-going costs to own, operate and maintain upgraded facilities that are required to support an interconnection request. The charge includes the same types of costs the company incurs with its own existing facilities, such as depreciation,

maintenance, property taxes, and cost of capital—despite the fact that these facilities are paid for in full by the interconnection customer.

The Clean Coalition recommends review of the calculation and assessment of these charges, which is currently assessed at 5.76% per year.[2] This means that where customers are responsible for interconnection costs, they are charged once for the cost of upgrades, and then charged again in either a monthly or one time cumulative charge for future replacement and associated costs even when the equipment is expected to have a service life equal to or exceeding that of the customer's DER facility. This practice effectively increases the cost of both interconnection facilities and required upgrades by 75.3%.[3] While the basis of the cost of ownership rate may be beyond the scope of this proceeding and more properly warrant attention in the General Rate Cases for its impact on all ratepayers, the formula for applying this charge to interconnection customers should be addressed here. The issue of whether customer charges should reflect costs based on the term of service defined in the Interconnection Agreement is a relatively narrow question that can and should be easily resolved. Where upgrades are required, this is the single largest factor contributing to wholesale (i.e., in-front-of-the-meter) interconnection costs and a major barrier to realizing the goals for DER deployment as reflected in state policy, the DER Action Plan, and the DRP, including the use of DER to defer or avoid the need for new grid investment to serve load.

3. ITCC and inconsistent treatment of liability to reduce costs associated with interconnection facilities & upgrades

Decision (D.) 94-06-038 established three options to assure payment to the purchasing utility for any future taxes: 1) pay the ITCC; 2) provide the utility a letter of credit for the value of the ITCC; or 3) execute an indemnity agreement and provide a

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[2] PG&E Monthly cost of ownership charge = 0.48%.

[3] Equivalent One-Time Charge: 0.48% x 12 x 13.07 (the present worth factor) = 75.3%. *See* Pacific Gas and Electric Company's *Generator Special Facilities Agreement*, available at https://www.pge.com/includes/docs/pdfs/b2b/newgenerator/wholesalegenerators/gsfa_6-29-041.pdf.

guarantee for the value of the ITCC. Despite D.94-06-038, Southern California Edison (SCE) is known to have requested interconnection applicants to pay the ITCC upfront on projects interconnecting to SCE's distribution system, despite stating elsewhere that it is allowing all three options.[4] In contrast, while the Pacific Gas & Electric Company (PG&E) reserves the right to require—on a nondiscriminatory basis—an Interconnection Customer to provide such security, PG&E has not been requiring this for projects in its territory, let alone requiring up front payment of the potential ITCC liability in full.

This proceeding should address inconsistency with D.94-06-038, inconsistency of treatment of interconnection customers within a utility service area, and encourage consistency in line with best practices between utilities.

ITCC charges, when applied, add roughly 30% to the cost of any upgrades associated with an interconnection request. As SCE territory's average total in-front-of-the-meter upgrade costs are approximately $150,000 per MW[5], these charges represent the second largest contributor to interconnection costs, despite the de minimis risk of actual liability being imposed.

4. Avoiding unnecessary transfer of ownership of interconnection facilities and upgrades

Under current practice, the customer is required to contact for and pay the utility for procurement and installation of interconnection facility and upgrade equipment, and subsequently transfer ownership of this equipment back to the utility from which it was purchased. This creates unnecessary costs and the practice should be reviewed in this proceeding. At least two alternatives warrant consideration.

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[4] For example, Southern California Edison Company, Energy Resource Recovery Account (ERRA) Review Of Operations, 2014, Chapters VIII-XVI, A.15-04-002 (Apr. 1, 2015), at 28, available at: http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/25FCD51A45ACEC1988257E1B005DD90D/$FILE/A1504002%202015%20ERRA%20Review%20-%20SCE-2%20Ch.%20VIII-XVI_PUBLIC.pdf

[5] This figure is from the Clean Coalition data request and reflects interconnections prior to 2013. Confidential quarterly interconnection cost reports from the IOUs were subsequently initiated and available to Commission staff.

The first option is to allow the applicant a method to retain ownership, while still granting the utility necessary rights and control. This would avoid the issues with the ITCC identified above while more significantly allowing the applicant to apply the 30% Federal Income Tax Credit and depreciation value on these costs, significantly reducing the cost of DER development and the services it provides.

Alternatively, converting to an interconnection fee to cover utility costs would allow the utility to hold original and continuing ownership of the facilities, while still avoiding the issues with the ITCC and the not insignificant administrative costs and delays associated with transfer of ownership.

5. Standardized Fees

We urge the Commission to consider a standardized, fee-based approach to interconnection facility and upgrade charges. As noted above, this is one approach to replace customer purchase and transfer of ownership costs and ITCC issues. More significantly for streamlining interconnection, adopting standardized fees for interconnection-related charges would avoid the substantial time and investment required to uniquely assess and allocat costs on a customized basis for each individual component of each interconnection application, then negotiating these estimates with the applicant to develop a final Interconnection Agreement, and then addressing 'true up' charges or reimbursements as well as potential disputes following construction.

The Commission has already adopted standardized fees for the Fast Track study process, and a standard fee for Net Energy Metered interconnections—both based on average costs. We recommend that the Commission consider extending this approach where practical to utilize cost-neutral, standard fees for common interconnection equipment and installation labor charges. In most cases, this would substantially reduce the work required to draft an interconnection agreement, increase consistency and predictability in pricing, reduce the need for negotiation and the likelihood of disputes, and overall reduce the average time to achieve an executed Interconnection Agreement while reducing the uncertainty risks for applicants that remain a major barrier to DER deployment and utilization.

6. Third Party Construction of Upgrades

Parties identified issues related to both the cost and schedule for utility construction required for DER to interconnect and commence operation. Utilities have limited staffing based on total yearly needs and prioritize commitments to meet planned work to maintain reliability, which varies by season. However, this often leads to lengthy delays in scheduling new interconnection work and uncertainty regarding those schedules. Parties have further noted that the costs quoted by utilities are frequently substantially higher that the cost for the same work from other utilities or independent contractors. Allowing approved third party contractors to perform required work would address both of these issues. In addition, competitive practices encourage efficiency in utility operations and reduce the costs and delays associated with construction for interconnection and other purposes.

The use of third parties for construction is in practice by other utilities in California, [6] and is explicitly allowed under the existing Rule 21 Tariff,[7] but investor-owned utilities have yet to implement this option. We urge the Commission to review this option, as it could substantially reduce the time and costs associated with service planning and the physical interconnection construction.

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[6] For example, Imperial Irrigation District *Rules for Interconnection of Distributed Generation Facilities*, Sec C.2.a&b.

> "These agreements shall set forth the relative responsibilities of IID and the Applicant, completion schedules, and fixed or estimated costs for the required work. …Where Applicable, IID or Producer Installs Required Interconnection Facilities or Modifies IID's Distribution System. After the execution of the applicable agreements, IID or an IID Contractor shall commence construction/installation of IID's Distribution System modifications to coordinate with the installation of the Interconnection Facility which are identified in the agreements.

IID staff reported multiple developer self builds annually, with time to completion and costs paid by applicants averaging 40% below IID estimates.

[7] Section H.2 (PG&E) of Rule 21 Tariff (Third Party Installations) provides that "Subject to the approval of Distribution Provider, a Producer may, at its option, employ a qualified contractor to provide and install Interconnection Facilities or Distribution Upgrades, to be owned and operated by Distribution Provider, on Distribution Provider's side of the PCC. Such Interconnection Facilities and Distribution Upgrades shall be installed in accordance with Distribution Provider's design and specifications."

7. Use of Existing and Planned Facilities

Current practice generally requires in-front-of-the-meter interconnections to have separate interconnection facilities, even when existing facilities to serve on site load are already available. This practice adds substantial costs, typically in the tens of thousands of dollars, for electrically-redundant service connection. These costs negate the value of many potential DER installations and increase the cost of others. Consistent with interconnection practices allowed for Multifamily Affordable Solar Housing (MASH) projects, where service drops are already in place and have sufficient capacity, they should be available for any interconnection of new generation or storage facilities at the same location, instead of requiring duplicate separate service.

Additionally, even when existing facilities or grid capacity is inadequate to support an interconnection request, replacement and upgrade of local facilities may already be planned to meet existing or projected load, reliability, and/or maintenance requirements. Where this is the case, the Commission should review the common practice of assigning costs to the interconnection applicant where these investments would have been required regardless of the interconnection request. The existing practice inappropriately and inconsistently burdens applicants and discourages DER development. The Clean Coalition recommended in the prior proceeding that only those costs that would not have occurred but for the request be allocated to the applicant. However, the issue was not addressed.

B. Proceeding process, structure and organization

The OIR scoping proposes four separate tracks to address the identified topics, but does not address the ordering, interaction, or prioritization of these tracks or the topics within each track. While it is appropriate to largely defer these questions to the assigned Commissioner or Administrative Law Judge with input from parties, we recommend clearly establishing whether any sequential ordering or prioritization is intended, and identifying this as an initial task for the proceeding.

In general, the Clean Coalition believes that in order to address the number of topics identified in a timely manner, some tracks will necessarily be required to proceed

in parallel. We further recommend that Commission staff, with input from parties, assess the topics for mutual dependencies, impact, urgency, and the estimated time and effort to address each issue, such that a schedule can be developed reflecting these factors.

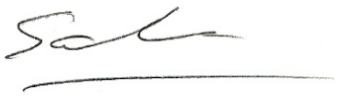
We also recognize that there is a very real risk for topics to be deferred and potentially never addressed, as occurred in the prior proceeding. Every effort should be made to avoid this outcome, as the failure to address topics perpetuates the associated barriers to interconnection, inhibiting the state from achieving related goals cost-effectively. Efforts at both defining areas of agreement, and seeking to resolve disagreement, have previously proven effective in developing broadly supported proposals and narrowing the scope of issues ultimately in dispute in the prior interconnection proceeding and elsewhere. We recommend pursuing similar efforts here for each topic as appropriate.

Items of greater complexity may be assigned to a working group, recognizing that all parties have limited capacity to participate in multiple working groups simultaneously

IV. CONCLUSION

Cost predictability, early cost determination, and efficient progress through both the interconnection agreement, service planning, and field work remain important issues for this proceeding. We appreciate the Commission's attention and parties diligent work in addressing the issues associated with interconnection in and offer these comments to further those ends.

Respectfully submitted,



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