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 REVISED REPLY 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 revised reply 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, and the Email Ruling Extending Deadline to File Replies to Comments on OIR issued August 14, 2017.

Summary

- Clean Coalition originally submitted reply comments in advance of the Ruling extending the deadline. These Revised Reply Comments differ only in adding responses to opening comments by SEIA and CalSEIA that were subsequently made available via the CPUC docket website for reply by stakeholders.
- All new issues raised by stakeholders, in addition to all unresolved issues from the prior proceeding, should be reviewed for scheduling based on multiple factors including potential significance, critical dependencies and timing, and ease of resolution.

- Pilot or limited early trial implementation of interconnection streamlining methods should be considered to speed development and refinement of practices.
- We support shared use of existing service lines.
- We support automation of interconnection processes.
- We support harmonization of tariffs across jurisdictions.
- We support addressing interconnection fees & distribution upgrade cost sharing.
- We support addressing construction scheduling and estimation
- We support addressing telemetry requirements.
- We oppose the Joint Utility request to remove the question of Itemized Billing from the current scope in this proceeding.
- We support addressing Cost of Ownership Charges
- We agree that Smart Inverter issues require coordination across proceedings
- We support review of Reporting of Interconnection Data by Utilities

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. Revision to Reply Comments

Clean Coalition originally submitted reply comments in advance of the Ruling extending the deadline. At that time the CPUC Docket Office had not been able to review, accept, and post all opening comments. These Revised Reply Comments differ from our original reply comments only in adding responses to opening comments by SEIA and CalSEIA that were subsequently made available via the CPUC docket website for reply by stakeholders.

B. Issue Scope, Grouping, and Prioritization

Many parties, including the Clean Coalition, support the division of topics into multiple tracks while urging clarification regarding the sequencing and interdependence of tracks and topics. Multiple parties also identified significant topics and recommended their addition to the initial scoping of issues to be addressed. The number of issues outstanding at the conclusion of the prior proceeding, [1] and new issues arising, argues for the importance of considering each in the scope of this proceeding and weighing them in accord with key factors and goals, which may appropriately include:

1. Addressing topics that can be resolved relatively quickly early on, so that these reforms can be implemented without further delay;
2. Prioritizing topics with respect to their anticipated impact to process improvement or value to ratepayers;
3. Sequencing interdependencies within this proceeding;

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[1] See 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 (11-09-011). See also the Report submitted to ALJ Bushey at the August 6, 2015, Status Conference in the same proceeding.

4. Coordinating dependencies across proceedings where such exist (ex. DRP ICA[2]);
5. Scheduling topics for reasonable conclusion within the proceeding's planned timeframe;
6. Balancing the attention to topics both within and between tracks to spread out the workload and reduce overlapping schedules where this would be more likely to limit the ability of parties to participate, including in working groups.

We note that pilot or limited early trial implementation of interconnection streamlining methods can speed development and refinement of practices, including both those requiring tariff revisions as well as practices that may be adopted in parallel with such revisions and in support to Commission goals. We urge the Commission to consider and encourage such efforts,[3] and to incorporate lessons learned.

C. Response to Party Comments on Specific Topics

1. *Shared use of existing service lines*

The Clean Coalition identified several important topics in opening comments for specific attention within this proceeding. We take this opportunity to note that the shared use of existing service lines for interconnection, and the responsibility for correcting undersized service connections that where not installed in accord with the customer panel rating, may be addressed under the scoped coordination with Rule 16 service connection study processes (Track 3, Item 11).

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[2] Several parties recommend waiting to begin ICA integration pending a Decision on ICA in the DRP proceeding. We note that a Proposed Decision is immanent and reasonably anticipate adoption by the Commission that will not warrant delay in this proceeding.

[3] See for example: Peninsula Advanced Energy Community, California Energy Commission GFO 15-312, Task 4: Interconnection Best Practices, and Interconnection Streamlining Pilot. Available at http://www.clean-coalition.org/our-work/peninsula-advanced-energy-community/

2. *Automation of interconnection processes*

The Clean Coalition noted the importance of automation in streamlining the interconnection process in our opening comments, and requested development of long-range goals and timelines on this and other interconnection topics. GPI emphasizes the importance of automation in detail[4], and appropriately cites the DRP Final Guidance's call for "dramatic streamlining" of interconnection and achieving "Plug and Play" interconnection, long standing support by a number of stakeholders, and the recent ICA Working Group Final Report reflecting this guidance and the need to focus on automation as a key path for achieving streamlining. The California IOUs have been making significant progress on their own initiative in applying automation to some aspects of the interconnection process. CALSEIA also notes this, and similarly recommends making them available for more types of projects, validating input data, and giving visibility to project status.[5] These efforts would benefit from CPUC guidance and clear delineation of goals and objectives.

3. *DER performance within existing hosting capacity constraints (Track 2, Issue 9)*

In opening comments SEIA call for Item 9 to be expanded from a narrow focus on curtailment provisions to conform to hosting capacity to a somewhat broader "conditions of operation" addressed in both applications and agreements.[6] We support both of these changes. Curtailment may be understood as a mechanism where the goal of conforming to ICA or other grid constraints can be achieved through other approaches. It is difficult to predetermine whether the term "curtailment" will unduly limit effective solutions, and it is appropriate to use more adaptable language. Of greater importance is SEIA's recommended inclusion of "and agreements". Issues are frequently identified in the course of the application review process that require

[4] Green Power Institute Opening Comments On Order Instituting Rulemaking at 3-5.

[5] CALSEIA at 4

[6] SEIA at 4

mitigation – indeed, the need for mitigation is commonly only established in the review process. As such, the development of provisions to allow DER projects to perform within existing hosting capacity constraints and avoid triggering upgrades should generally be addressed in Interconnection Agreements rather than applications, although attention to potential issues and options in applications can be very effective in rapidly addressing any identified mitigation need.

4. Harmonization of tariffs across jurisdictions (Track 3, Issue 14)

CESA calls for synergy with FERC jurisdictional Wholesale Distribution (WDAT/WDT) interconnection tariffs.[7] We note that the Commission called for harmonization between Rule 21 and FERC distribution tariffs in opening the prior proceeding (R.11-09-011) and Settlement Parties agreed to use the existing WDAT as a foundation for major revision of Rule 21 at that time. As a party to the Settlement, the Clean Coalition supported this action, although harmonization is a two way process, in which the goal is for each tariff to incorporate improvements developed in the other. Rule 21 is the Commission's opportunity to advance interconnection practices. In the event of any identified advances from FERC jurisdictional tariffs not already reflected in Rule 21, these should be considered for adoption and improvement. We agree with CESA that easy transition between the tariffs should be a goal, although this should not inhibit the Commission from adopting improved practices in Rule 21 that can then be incorporated into FERC jurisdictional tariffs. Indeed the Commission should redouble its encouragement of harmonization of advancements, and in fact improvements in process efficiency should inherently incentivize adoption across all related tariffs. This issue is related to Track 4, Item 22, but goes beyond the specific focus on small and multi-jurisdictional utilities, and as such should be considered a separate item.

CALSEIA notes Issue 14 involves the coordination of projects transferring between the Rule 21 and WDAT queues. CALSEIA expects this includes the consideration of Rule 21 projects seeking to interconnect at a location that is already

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[7] CESA opening comments at 8-10.

subject to WDAT projects undergoing interconnection review, noting it is a common occurrence that small projects that may not cause a need for upgrades have to wait long periods of time for the review of large projects under WDAT, and that these small projects have to wait for large WDAT projects to pay for required upgrades before smaller projects can even be considered.[8] We agree this is creating undue barriers to streamlined interconnection and that remedies may be available in common circumstances without impacting cost allocation. We support the expectation that Issue 14 will include this topic.

5. *Interconnection fees & distribution upgrade cost sharing (Track 3, Item 13)*

IREC recommends the proceeding revisit interconnection fees to ensure that they are appropriate and serving their intended purpose. The Clean Coalition agrees that existing fees should be reviewed, and alternative fee structures considered. In particular, we recognize the success of the standardized fee applied to cover average utility costs associated with Net Energy Metering (NEM) tariff interconnection requests, and urge the Commission to consider extension of this approach, in pilot or tariff, to similarly streamline other interconnections. We noted this topic in our opening comments. The proposed Track 3 Item 13 may address this issue, however it is worthy of specific mention, while review of existing fees warrants attention as a separate item that may be resolved without great effort.

SEIA also raises a related issue, stating that a near-term focus on cost-sharing is warranted and that areas on the distribution system reaching saturation of DER deployment should not rely on the developer who triggers an upgrade to pay for that upgrade to the benefit of future and previous projects.[9] We agree, noting that Clean Coalition and other parties have long raised the issue of cost responsibility for where utility facilities were already exceeding their standard capacity or lifespan, or where

[8] CALSEIA opening comments at 3

[9] SEIA opening comments at 2-3

upgrades are already scheduled through the regular planning process but not implemented.

The Joint IOUs state that distribution upgrade cost sharing is already addressed through the Distribution Group Study Process (DGSP).[10] This is only partially correct. The DGSP addresses cost sharing among applicants entering the interconnection queue within a specified window of time where studies are contingent upon results of prior applicants. DGSP is able to aggregate projects occurring during the same period, but does not address cost sharing for subsequent electrically related interconnections. The New York Public Service Commission has addressed this issue in a proposal that could easily be incorporated into Rule 21 and should be considered. However, such an approach still relies upon individual customized study results, a process that conflicts with the goal of speedy and streamlined interconnection practices. The proposed cost sharing topic should include consideration of standardized fees – sharing the average cost among all similarly situated applicants – if we are to address one of the greatest opportunities for interconnection streamlining.

6. Interconnection construction scheduling and estimation (Track 3, Item 13)

In opening comments CALSEIA notes that improved certainty of timelines for estimating and construction is also needed within Rule 2, which governs "special facilities." CALSEIA recommends clarifying the scope of Issue 13 to include estimating and construction within Rule 2.[11] We agree that this is an important issue known to have commonly resulted in substantial delays and rescheduling of actual interconnection after the Interconnection Agreement has been completed. To the extent it can be addressed within this proceeding, it clearly warrants attention.

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[10] Joint Utility opening comments at 9

[11] CALSEIA opening comments at 2

7. Telemetry requirements (Track 3, Item 15)

Joint Utilities recommend early attention to telemetry requirements[12] (Track 3, Item 15). The Clean Coalition supports this prioritization. As we move forward in making DER capabilities more fully available to both distribution and transmission system operators, distribution operators will require appropriate levels of visibility and communication to optimize DER value. The DRP and IDER proceedings are engaged in pilots to evaluate DER capabilities and associated management systems (DERMS), and the CPUC, CEC, and CAISO are giving attention to the role of distribution system operators (DSOs) and DER aggregators in coordinating and optimizing use of DER to meet multiple simultaneous applications at customer, distribution, transmission, and market granularities. The appropriate cost effective forms of telemetry and associated cost responsibility are essential to review, establish preliminary new standards where warranted, and refine as the functional requirements and value become more clear. As we have previously argued, the cost of telemetry must not exceed its value, and the allocation of costs should align with benefits.

8. Itemized Billing (Track 3, Item 16)

Joint Utilities request removal of the topic of itemized billing[13] based on the fact that the recently adopted Interconnection Cost Envelope Pilot includes itemized billing. The Clean Coalition disagrees with this reasoning. While the Cost Envelope Pilot does apply itemized billing, the purpose of this pilot is to offer cost certainty, and while it did incorporate itemized billing, it was not the intention of parties to in any way discourage the use of itemized billing beyond its use in this pilot. To the extent that there is value in itemizing the charges assessed on applicants, delaying consideration for at least five years is certainly unwarranted.

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[12] Joint Utility opening comments at 5

[13] Joint Utility opening comments at 10

9. Cost of Ownership Charges

Clean Coalition requested adding the issue of Cost of Ownership (COO) charges in opening comments. We note that CALSEIA raises the same issue and requests the Commission review the level and structure of this fee, and consider a more exact linkage between levels of COO and actual utility costs for different types of equipment.[14]

10. Smart Inverters (Track 1, item 6)

SEIA calls for smart inverter control and compensation functions to be timed to follow relevant discussions in the IDER and other related proceedings.[15] Both tariff and technical requirements are dependent on an understanding of what services will be utilized, how the inverters will be operated to realize those services, and how use will be measured for both tariff compliance and compensation. We agree that timely coordination between proceedings on this topic is very important to avoid implementation of unnecessary requirements and associated facilities, or failure to implement requirements that would have substantial net benefit.

11. Reporting of Interconnection Data by Utilities

CALSIEA requests the Commission order utilities to produce interconnection totals monthly and data on interconnection timelines quarterly.[16] We note that Energy Division has previously ordered regular public reporting on interconnection processing and confidential reporting on costs, however compliance with reporting schedules has become inconsistent as staff were reassigned both at the Commission and at utilities. In R.11-09-011 both parties and the Commission were frustrated in attempts to assess the breadth of anecdotal issues reported, evaluate procedures, and identify areas warranting revision due to a lack of information. We strongly agree that reporting

[14] CALSEIA opening comments at 4

[15] SEIA opening comments at 3

[16] CALSIEA opening comments at 6

requirements and compliance should be reviewed and updated for the benefit of this proceeding and interconnection applicants.

IV. CONCLUSION

We appreciate the Commission's attention and parties' history of diligent work in addressing the issues associated with interconnection and offer these reply comments to further those ends.

Respectfully submitted,

Kenneth Sahm White
Director, Economic and Policy Analysis
Clean Coalition

Dated: August 25, 2017

VERIFICATION

I, Kenneth Sahm White am the representative for the Clean Coalition for this proceeding. I am authorized to make this verification on the organization's behalf. The statements in the foregoing document are true of my own knowledge, except for those matters that are stated on information and belief, and as to those matters, I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 25, 2017, at Santa Cruz, California

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