**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)

REPLY OF THE CLEAN COALITION TO COMMENTS ON ADMINISTRATIVE LAW JUDGE'S RULING REQUESTING RESPONSES TO QUESTIONS ON WORKING GROUP ONE FINAL REPORT

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I. INTRODUCTION

Pursuant to the August 15, 2018 *Administrative Law Judge's Ruling Directing Responses to Attached Questions on Working Group One Report* ("Ruling"), the Clean Coalition provides these replies to Party responses to certain questions in the Ruling.

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 is a project of Natural Capitalism Solutions, a 501(c)(3) non-profit.

III. Comments

The Clean Coalition actively participated in the Working Group and development of the Report, building upon a history of leading participation in Rule 21 and related issues. We offer the following responses to matters raised in opening responses to the Ruling's questions.

Question 1. For non-Utility stakeholders: Explain whether you prefer the use of nameplate capacity or net export to measure the threshold for the Screen Q exemption. What are the policy reasons to justify adoption of your preference?

IREC and Tesla support using net export to measure the threshold for the Screen Q exemption.[1]

IREC argues correctly that it is important to protect the right of customers to reduce or manage their electricity loads through investments in distributed energy resources [DER] without having to undergo onerous and unnecessary interconnection study processes.

The Clean Coalition strongly supports the right of customers to reduce or manage their electricity loads using DER, and agree that no party should be subject to onerous and unnecessary interconnection study processes in terms of either costs or schedules. However, we also recognize the responsibility of the grid operator to ensure safety and reliability, and the need for study is based on the electrical characteristics and grid impacts of customer activities, including DER operation. As such, studies should be required based on the physical characteristics of the project, and these are *not determined in any way by the location of the meter relative to the generation and load*. All DER with comparable physical and operational characteristics should be subject to the same engineering review.

Questions of cost responsibility and timing are separate from the engineering review itself, and the Clean Coalition supports addressing these matters so as to streamline the customer experience and minimize delay and uncertainty. To the extent

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[1] Opening response of IREC at 1-3, Tesla at 1-2.

that projects below a statistically determined size will have a negligible effect on grid operator costs, it is inefficient to delay these projects or subject customers to undue uncertainty regarding cost or schedule. The Commission should clearly define "negligible impact", however we suggest that contributions of less than 0.1% is a reasonable threshold to consider below which the burdens on customer applicants outweighs the benefits of requiring study prior to approving interconnection. This is especially true given that DER deployments have a net positive impact on transmission capacity requirements, avoiding billions of dollars in investment.[2]

It appears that projects up to 1 MW typically contribute less than 0.1% to upgrades considered in transmission studies, and this may well be true for projects of 3 MW or even larger, regardless of whether they are full export, NEM, or non-export. The burden of proof should rely upon demonstrated value of study requirements outweighing the burden. Absent evidence that the likelihood for projects of this size to significantly influence transmission cost allocation is greater than the burden of delay, uncertainty, and added costs, it is appropriate to exempt such projects from Screen Q.

IREC also correctly notes[3] that utilities should differentiate between those impacts caused by export and those that are not, and only consider net export where the size of export is the operative factor. The Clean Coalition strongly supports this position in regard to the evaluation of grid impacts. With regard to whether or not exemption from Screen Q applies, it would be also be appropriate, and will require the screen

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[2] The 2017-2018 Transmission Plan, which outlines the proposed design and construction of transmission networks for the next decade, recommends the cancellation of 18 transmission projects and revisions of 23 others, avoiding an estimated $2.6 billion in future costs. The changes were mainly due to changes in local area load forecasts, and strongly influenced by energy efficiency programs and increasing levels of residential, rooftop solar generation, beyond those already accounted for in forecasts. These savings represent only the capital costs and do not account for the additional ratepayer savings on maintenance and return on owner investment over the project life. Available at: http://www.caiso.com/Documents/BoardApproves2017-18TransmissionPlan_CRRRuleChanges.pdf

[3] IREC opening response at 3-4

review to differentiate between the nameplate and net export values. While this would add minor complexity the number of applications where this will be required is expected to be a small fraction of total applications such that the effect on overall application review will be insignificant, but the implications for these applicants will be meaningful.

8. What, if any, are the material electrically-related differences between net energy metering ("NEM") and non-NEM projects for the purposes of the Screen Q exemption?

SCE states that typically, NEM projects are non-synchronous, and accordingly, non-NEM projects are more likely to be synchronous than NEM projects. Synchronous and non-synchronous machines differ in electrical characteristics.[4]

This response requires greater clarification to be useful. While it is true that the percentage of non-NEM projects under Rule 21 that are synchronous is higher than the percentage of NEM projects that are synchronous, in both cases the percentage is very small – both NEM and non-NEM projects are typically non-synchronous.

The important point is that the technological characteristics of the projects are the salient factor, not whether the applicant is seeking net energy usage metering bill credit for their metered load to be offset by their exports.

The NEM versus non-NEM distinction does not consistently define any material electrically-related differences, and in fact most projects are materially identical in their net effect on the electric grid relative to their size.

9. Describe potential issues with expanding the Screen Q exemption from NEM projects to all projects, including any interactions with the Utilities' wholesale distribution tariff study processes and the CAISO Tariff procedures.

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[4] SCE opening response at 5

TURN urges the Commission to consider that network capacity is not free, argues that NEM and other distribution connected projects "use up existing network capacity" and states that "absent evidence showing that the benefits received by ratepayers from these non-NEM projects being connected to the network would be greater than the potential costs faced by ratepayers, the Commission should not expand the Screen Q exemption from NEM projects to all projects."[5]

The Clean Coalition strongly agrees that network capacity is not free – in fact transmission costs already add 2¢/kWh to the cost of delivered energy and these costs are escalating. However, with rare exception, distribution connected projects do not export energy to the transmission and instead serve to meet local capacity needs, generally reducing network congestion and capacity requirements. As noted above, last year alone $2.6 Billion in new transmission capital savings were realized as projects were canceled or scaled back due largely to greater than forecast network load reductions from small solar and energy efficiency.[6] While the bulk of small PV capacity has been driven by NEM program customer deployments, the network benefits are determined by the operational profile of the technology and equal regardless of the tariff or program under which they are interconnected. As such, there is abundant evidence that showing that the benefits received by ratepayers from these non-NEM projects being connected to the network would be greater than the potential costs faced by ratepayers, the Commission should expand the Screen Q exemption from NEM projects to all projects.

IV. CONCLUSION

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

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[5] TURN opening response at 3

[6] See: http://www.caiso.com/Documents/BoardApproves2017-18TransmissionPlan_CRRRuleChanges.pdf

non-consensus proposals in order to resolve the issues identified for this proceeding, look forward to offering additional information or comment on questions by Commission or proposals by Parties.

Respectfully submitted,

Kenneth Sahm White
Director, Economic and Policy Analysis
Clean Coalition

Dated: April 16, 2018

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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