BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Resources Future.

Rulemaking 21-06-017
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CLEAN COALITION REPLY COMMENTS IN RESPONSE TO ADMINISTRATIVE LAW JUDGE’S RULING DIRECTING RESPONSES TO QUESTIONS ON TRACK 1 PHASE 1

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I. INTRODUCTION

Pursuant to Rule 6.2 of the Rules of Practice and procedure of the California Public Utilities Commission (“the Commission”), the Clean Coalition respectfully submits these reply comments in response to the Administrative Law Judge’s (“ALJ”) Ruling Directing Responses to Questions On Track 1 Phase 1, issued at the Commission on April 6, 2023.

II. DESCRIPTION OF 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, demand response, and energy storage — and we establish market mechanisms that realize the full potential of integrating these solutions for optimized economic, environmental, and resilience benefits. The Clean Coalition also collaborates with utilities, municipalities, property owners, and other stakeholders to create near-term deployment opportunities that prove the unparalleled benefits of local renewables and other DER.

III. RESPONSE TO PARTY COMMENTS

A. The DPP Planning Horizon is Insufficient

In addition to the Clean Coalition, Green Power Institute (“GPI”), the Coalition of Utility Employees (“CUE”), and San Diego Gas & Electric (“SDG&E”) all made arguments that a longer planning horizon would be more effective for the distribution planning process (“DPP”). GPI noted that it is more effective to consider a longer planning horizon for multi-decade
equipment than to be forced to replace equipment every few years based on a new load growth forecast, concluding that, “It may also make sense to include two different planning horizons, with different degrees of certainty, such as, for example: 1) the five-year horizon with a relatively high level of certainty; 2) the 15-year horizon with a relatively lower level of certainty. Any infrastructure investment decisions would then consider both time horizons before expenditures are made.” In Opening Comments, Clean Coalition also introduced the concept of having a shorter-term and a longer-term forecast, to ensure that the state is on the right track in terms of meeting electrification goals, while also ensuring that the short-term forecast is accurate. SDG&E concurs, stating, “planning beyond five years can and should continue as long-term electrification needs within the SDG&E distribution service area, and the associated IEPR load forecast, changes.” CUE also makes a similar statement, suggesting that electrification must be a key consideration of the Commission when reforming the DPP.

B. Secondary Distribution Infrastructure Costs

It has always been apparent that the cost of secondary distribution upgrades required to achieve electrification, including service line drops, transformers, lower-voltage lines, as well as main service panels, will be massive. However, the recently published Kevala Electrification Impacts Study quantified the cost of secondary distribution impacts, to the tune of a $50 billion price tag. A job of that magnitude necessitates a long-term plan, which is why our opening comments highlighted the need to consider secondary distribution infrastructure along with the rest of the primary distribution system in the DPP. GPI concurs, noting that these costs should be included even though the vast majority of secondary distribution projects will not meet the cost threshold for deferral. CUE summarizes this issue perfectly with the statement, “There is no reason for the IOUs to be surprised by a needed capacity upgrade that is easily foreseeable because an electrification project is required by government policies or is needed for a new housing development that the local planning department has known about for months or years.”

1 Opening Comments of GPI at p. 6-7
2 SDG&E’s Opening Comments at p. 6.
3 CUE’s Opening Comments, at p. 2.
5 GPI at p. 9
6 CUE’s Opening Comments at p. 2.
C. ICA Data

There was consensus among parties that the ICA data and associated maps still require improvements before use in the full range of use cases—siting, interconnection, and planning—envisioned the Commission is possible. We broadly supports comments made by GPI, IREC, and CBD et al in response to the questions on ICA data. Like the Clean Coalition, these parties argued for improvements to that the ICA data including [methodology] validation, reviewing both Generation and Load ICA data, and making the tool forward-looking. The faster the improvements can be made, the better, particularly when it comes to data validation. We believe that data validation is foundational for increasing developer trust in the tool and concur that removing all accuracy issues within a calendar year would be ideal. Furthermore, as it would increase the pace with which ICA improvements are rolled out and root causes analyses are completed, the Clean Coalition agrees with IREC that, “The Commission should explore how the ICA itself, and the utilities computational resources, could be improved to enable faster processing of ICA results.”

D. ICA Use Cases

The primary use case for ICA data as it currently exists is in helping potential applicants determine what the interconnection experience for a project will be like depending on the location where it is sited. GPI supports validating the data, while arguing that the priority should be ensuring that the final data is “actionable” in the interconnection process. We addressed this same issue in opening comments, noting that the maps do not make it easy to determine which constraint is the limiting factor or what the cost burden will be to upgrade the infrastructure at a location with little remaining hosting capacity. Regardless of the result produced by an ICA map, a utility engineer will conduct a study to make the final determination once an interconnection application is submitted. However, the fact that ICA data is not relied upon in the interconnection process is more a statement on the need for data validation rather than the

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7 GPI at p. 13, Cal Advocates at p. 11, SCE at p. 16, IREC at p. 2-3, PG&E at p. 15-16, CBD et al at p. 33, SDG&E at p. 14, and MRC at p. 5.
8 Parties made it clear that Generation ICA has been around for longer than Load ICA, which is why the Load ICA data needs a greater number of improvements.
9 IREC at p. 21.
10 Ibid at p. 33.
11 GPI at p. 13.
usefulness of the data itself. IREC’s comments provide additional context on the role of improved ICA data in the interconnection process with the suggestion that, “ICA’s capabilities should be expanded to include the technical considerations that are currently evaluated in Rule 21 screens G, H and L.”\textsuperscript{12} Related to this, the Clean Coalition concurs with IREC that all three of the utilities should fully integrate smarter inverter capabilities into the ICA models, particularly volt/var control functions.\textsuperscript{13}

Beyond interconnection, the ICA data also has the potential to be valuable for siting and planning purposes. Cal Advocates opines, “The ICA should be a forward-looking tool that is fully integrated with utility distribution planning. Moreover, the ICA should be based upon the stochastic models of load growth and weather variation that PG&E and SCE state they will use in distribution planning.”\textsuperscript{14} For the ICA to be truly forward-looking, it will be necessary to incorporate demand forecasts, known loads, and planned upgrades; the Commission should take a more stringent approach to oversight—and consider allocating additional resources—to expedite the timeframe of the existing utility implementation plans. IREC explains how a more forward-looking tool would function, requesting that:

The Commission should establish a clear requirement that the ICA accurately reflect how the system would be expected to operate under the modeled conditions. Ensuring this requires three critical factors: (1) data inputs that accurately reflect distribution equipment and system conditions, (2) a model which accurately reflects how the distribution system components actually operate in the field, and (3) the use of thresholds for the technical criteria that are reasonable and the same as what the utility would use in assessing the need for upgrades in a full system impact study.\textsuperscript{15}

With such a tool, a developer attempting to site a project in a location with little available hosting capacity might request to the ability to deploy a battery or other non-wires alternative to solve for the limiting factor rather than covering the full cost of a substantial upgrade. On the other hand, in terms of increasing developer certainty, GPI makes an interesting suggestion for, “overlay that attempts to show the $cost per MW of interconnection at each node or line section,”\textsuperscript{16} as a potential addition to the ICA maps.

\textsuperscript{12} IREC at p. 31
\textsuperscript{13} Ibid at p. 31
\textsuperscript{14} Cal Advocates at p. 11.
\textsuperscript{15} IREC at p. 6.
\textsuperscript{16} GPI at p. 17.
E. PG&E’s Comments Demonstrate the Need for Data on Reasons Why Developers Withdraw Interconnection Applications.

While discussing ICA data in opening comments, PG&E mentioned that less than 1% are notified of a capacity constraint. Specifically, PG&E states, “Currently, approximately fifty-nine percent (~59%) of load applications submitted to PG&E are withdrawn before moving into the utility design phase. Of the over 100,000 load applications PG&E receives per year, PG&E has indicated some type of capacity constraint for less than 1%. Therefore, most of these application withdrawals are not related to capacity constraints but due to the preliminary nature of these applications.”

This statement is intended to suggest that capacity constraints are not causing slowdowns in the interconnection process, but actually demonstrates that the utility has little to no idea why the majority of load applications are being withdrawn. If 1% of applications are withdrawn due to capacity constraints, then the remaining 58% of applications being withdrawn prior to the utility design phase are unaccounted for. Furthermore, it does not appear as if the utility has any visibility into reasons why any load applications are withdrawn during or after the utility design phase. We believe that improving the process requires better data and that each of the IOUs should survey an applicant if an interconnection application is withdrawn.

F. Resiliency Should be Considered in the DPP.

The Clean Coalition does not agree with SCE resiliency is adequately considered in other proceedings and does not need to be addressed in the High DER proceeding. While other proceedings are considering microgrid tariffs and compensation, there is no proceeding that considers locations on the existing distribution grid that would benefit from resilience or how to incorporate Community Microgrids into the planning process. For example, in opening comments, the Clean Coalition provided the example of the Goleta Load Pocket (“GLP”), an area with a sole set of transmission lines running through a high fire threat district. Load pockets throughout California as well as rural areas and remote grids are all perfect candidates for renewables-driven microgrids. The development of some microgrids will be community or

17 PG&E’s Opening Comments at p. 3
18 SCE’s Opening Comments at p. 3.
19 Clean Coalition’s Opening Comments at p. 5.
developer-driven, but that should not absolve the utilities of the responsibility to consider resilience planning as part of grid planning/operation, in addition to the focus on reliability.

IV. CONCLUSION

The Clean Coalition appreciates the opportunity to submit these reply comments and looks forward to continuing to collaborate with parties on how to best reform the DPP and improve ICA data.

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