

**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
Filed June 24, 2021

CLEAN COALITION COMMENTS ON STAFF PROPOSAL

/s/ BEN SCHWARTZ

Ben Schwartz
Policy Manager
Clean Coalition
1800 Garden Street
Santa Barbara, CA 93101
Phone: 626-232-7573
ben@clean-coalition.org

May 29, 2024

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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 this response to the *Administrative Law Judges’ (“ALJ”) Ruling Seeking Comment on Staff Proposal*, issued at the Commission on March 13, 2024, and *ALJ’s Ruling Memorializing Extension of Time to File Comments and Providing Corrected Staff Proposal*, issued at the Commission on April 5, 2024.

I. INTRODUCTION

The Staff Proposal overviews the existing distribution planning process and the Integration Capacity Analysis (“ICA”), offering in-depth proposals with potential improvements. Ensuring that the distribution grid can be upgraded in a timely manner and that tools are available to accurately assess the impacts of increased load/generation at a site are both critical to put the state on track to achieve climate and energy goals.

We appreciate the thoroughness of the Staff Proposal and support many, if not most, of the proposals included therein. Regarding distribution planning, the Clean Coalition supports the use of bottom-up data, a longer planning horizon, and greater inclusion of equity metrics to help prioritize projects in instances where there are limited resources. Overall, we support timely upgrades to the distribution grid where needed and maximizing use of the existing system, wherever possible, including the use of distributed energy resources as a tool to defer the need for upgrades. The deferral framework has demonstrated ratepayer (“DER”) savings when projects are deployed; reform to the process to increase the opportunities for deferral, including the development of microgrids to meet “resiliency” needs will help reduce utility costs and may move up the timeline for a deployment, depending on resource constraints. Clean Coalition comments on ICA issues relate to the need to improve the accuracy of the tool and associated maps. We appreciate proposals to conduct cosmetic changes to the maps and studies, albeit the value is lessened if the quality of the data shown is too low to be useful for either developers or the utility. While some degree of data validation has been conducted, it is clear that erroneous

results are present in each of the three utility’s tools, and there is still a clear need for results validation. The Load ICA data is known for being unreliable, leading to an increased number of interconnection applications submitted solely for the purpose of getting accurate grid information about a site. Improving the Load ICA tools, and Southern California Edison’s (“SCE”) generation tool will be extremely useful for increasing DER siting opportunities.

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 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. DISTRIBUTION PLANNING

3.2.4. Utilities to Expand the DPP Forecast Horizon to Align with the IEPR and Expand the Planning Horizon to 10 Years

The Clean Coalition advocated for a similar concept in opening comments responding to Phase 1 Track 1 questions, noting that 15 years is a reasonable time horizon given the CAISO is producing 20-year transmission plans. We support expanding the horizon to 10 years and believe that 15 years is a feasible option as well due to the certainty of increased demand, EV adoption, and policies that promote electrification.

3.2.8 – Grid Modernization

The Clean Coalition supports this proposal. The IOUs currently have plans for DERMS; more information should be presented on timelines for developing DERMS and what the rollout will look like. DERMS are a fundamental aspect of Community Microgrid development and enable the optimal dispatch of DER, increasing the value creation from each incremental deployment.

3.2.10 – Equity & 3.2.11 – Project Prioritization

The Clean Coalition supports including equity as a factor in distribution planning. The lack of investment in disadvantaged communities represents a historical inequity and will continue to result in these communities lagging behind wealthier communities unless the investment framework is changed. Investing in equity communities and meeting the goals in the Environmental & Social Justice (“ESJ”) Action Plan 2.0 actively requires making different funding choices, not just “considering” equity. The need for change is especially evident in PG&E’s service territory, where the purported lack of available funds is resulting in projects in equity communities being proverbially put on the back burner, while upgrades elsewhere are pursued. Re-focusing the distribution planning process to harmonize with the Commission’s equity goals is an important step forward to enabling a high DER future for all communities.

3.2.13 – Community Engagement

We strongly support this proposal as critical for enabling a high DER future. One of the many reasons that the Clean Coalition supported AB 50 in the legislature, testifying in both the Assembly and the Senate, is the need for conversations between local governments and utilities when it comes to distribution planning. Electrification and decarbonization will be achieved at a system-level, but much of the change will be realized at the local level including new facility deployed, load growth, building & transportation electrification, and DER deployments. An efficient and predictable process to deploy new facilities and conduct upgrades as loads increase is needed. Local governments need transparent and actionable information about the existing grid for planning purposes and the IOUs need to know where growth will occur to make investments in a timely manner. Slow existing procedures, if not addressed today, **will** become significant impediments to progress in the future. Therefore, enabling and enhancing two-way discussions between the utilities and governments about planning and forecasting is essential for ensuring that the state is on track to achieve climate and energy goals. We support the development of a Community Engagement Plan, but posit that the Commission should also require the IOUs to provide annual reporting on outreach with local municipalities, providing a window into efforts that are being conducted and instances where increased oversight is required to ensure local needs are being met in a timely manner.

3.3 From DIDF to Transparency in Distribution Planning

The Clean Coalition believes that the lack of effectiveness of DER deferral is in part because of the overly-structured process and the fact that there are very few options for developers to consider. We strongly advocate that the DIDF should not be ramped down and refocused on transparency. Given the significant cost of upgrading the grid due to electrification, long lead times for conducting upgrades, and limited resources in the case of PG&E, increasing the opportunities (and the timeframe) for DER deferral will be beneficial to the ratepayers. Two deployed projects in SCE's service territory resulted in over \$7 million in deferral value, clearly showing that the ratepayers benefit from successful deferral. In the case of the nearly 700 underfunded or non-funded upgrade projects in PG&E's service territory, funding deferral projects at 90% or less of the cost of a traditional upgrade will help address the backlog and reduce the impact on the ratepayers. In addition, supply chain shortages persist for equipment that includes transformers, making the ability of DER to defer upgrades even more valuable. The Clean Coalition supports factoring in the ability to acquire a resource needed to conduct a traditional upgrade into the deferral framework, which will help value the ability to efficiently deploy DER solutions.

Under the existing DIDF, there are not many candidate projects listed to be deferred, especially in comparison to the total amount of traditional upgrades conducted each year. Only one or two projects are listed for each IOU pilot, and there is great uncertainty due to contracts being cancelled, reducing the number of developers who would otherwise be interested. In addition, no resilience projects are offered for deferral, regardless of the fact that significant investments are made by the IOUs into resilience, including grid hardening and wildfire mitigation. The DIDF needs to be amended to truly give the full opportunities for DER deferral where there is potential for ratepayer savings, not just one or two options to fulfill the requirements of pilots adopted by the Commission.

3.3.1 – Allow IOUs to use bottom-up data.

The Clean Coalition supports the use of bottom-up data and appreciates that the Staff Proposal recognizes our recommendation in previous comment cycles.

3.4.2 - New Goal for DIDF: Reporting on Distribution Planning Rather than Deferring Distribution Infrastructure Investments

See the response to 3.3, above. The Clean Coalition does not support refocusing the DIDF away from DER deferral. Reform is necessary to streamline the process and increase opportunities, but eliminating the option entirely will maximize the costs to the ratepayers associated with electrification and decarbonization. Electric rates are already high; pursuing strategies to reduce costs is essential for cost containment.

IV. INTEGRATION CAPACITY ANALYSIS (“ICA”) DATA AND MAPS

The Commission authorized ICA maps in 2017, in accordance with Assembly Bill (“AB”) 327 as a way to increase the transparency in the IOU’s distribution planning processes, supporting DER siting and interconnection use cases. In theory, the Generation ICA results can help developers interested in installing a project in a location where grid upgrades will not be required and the Load ICA can help with requests for increased service or the deployment of electric vehicle (“EV”) charging infrastructure.

The gold standard continues to be achieving quality data that is “actionable”. However, further investment is needed to guarantee accurate results, let alone consistently accurate results. Developers and IOUs alike have been unable to consistently use the ICA as a reliable and trusted source of information. This is especially true for the Load ICA data, but also for Generation ICA data, to a certain extent. The Clean Coalition supports many of the proposals in the Staff Proposal but wishes to note that what is missing is a solution that addresses the fundamental problems of outdated inputs, a lack of consistent data validation, and the need for **results** validation. The priority needs to be bringing all of the platforms up to an accurate and usable condition within the next year or two, not allowing five years to pass before there are meaningful changes. Improving the usability of the ICA Maps is only valuable when the information being presented is accurate and usable.

CIRCUIT_NAME	VOLTAGE	YEAR	MONTH	HOUR	MIN_LOAD	MAX_LOAD	SUBSTATION	MONTHLABEL
Professor	16KV	2018	9	15	22.43	38.28	Isla Vista	Oct, 15
Professor	16KV	2018	9	16	22.56	37.66	Isla Vista	Oct, 16
Professor	16KV	2018	9	17	22.51	36.33	Isla Vista	Oct, 17
Professor	16KV	2018	9	18	23.36	35.34	Isla Vista	Oct, 18
Professor	16KV	2018	9	19	23.3	34.59	Isla Vista	Oct, 19
Professor	16KV	2018	9	20	22.75	33.49	Isla Vista	Oct, 20
Professor	16KV	2018	9	21	22.15	32.25	Isla Vista	Oct, 21
Professor	16KV	2018	9	22	21.21	30.56	Isla Vista	Oct, 22
Professor	16KV	2018	9	23	20.24	28.81	Isla Vista	Oct, 23
Professor	16KV	2018	10	0	18.42	26.14	Isla Vista	NOV, 00

Circuit Load Profile for the Professor Feeder in Isla Vista, CA (in .xls format)

For example, the load profile for the Professor circuit, located in SCE's service territory, appears to last have been updated in 2018 (six years ago). Even if the model works correctly, using out-of-date inputs will result in unusable results. Granted, each IOU's ICA tool is at a different level of usefulness, with Southern California Edison's ("SCE") being far and away the least developed due to a lack of investment and focus on improvement, as clearly demonstrated by two massive data issues in the last three years (in addition to the other problems that have gone under the radar or been ignored). Each of the IOUs will need to make additional investments in staff and computing power to bring the ICA data (and maps) to the level envisioned by the Commission. We envision this as a few steps:

- Conduct a circuit-by-circuit analysis to update feeder load profiles, removing outdated information to improve data inputs.
- Conduct an analysis of model outputs to validate the results for accuracy.
- Improve the viability of the Load ICA so it can be used for siting purposes within two years.
- Ensure that ICA data is refreshed if inaccuracies are detected due to an interconnection application, update information monthly, and refresh once annually.
- Make data results available in a transparent fashion so stakeholders may conduct their own analysis without having to go through the data request process.
- Require SCE to improve its ICA tool to be at least as useful as the ICA data from SG&E and PG&E within the next two years.
- Include the estimated cost of upgrades required to address projects that trigger a limit on the ICA maps.

5.3.1 - Incorporate More Detail of the Limiting Criteria into ICA Results in the Data Portal Maps

The Clean Coalition supports the inclusion of additional detail into the ICA results. Showing which limiting factor is triggered will help developers get a grasp on what the price tag for a potential grid upgrade might be and allows for the development of a more tailored solution such as a flexible connection. We view this solution as a low-hanging fruit that should be pursued. However, fundamental to the benefits of this proposal is having accurate results.

Without accuracy, additional detail is not useful, particularly if the result is a developer submitting an interconnection application to get the most recent data.

5.3.2. Remove All PG&E and SDG&E Registration Requirements for Data Portal Access

The Clean Coalition appreciates the inclusion of this proposal in the Staff Proposal, given that we have raised this issue numerous times in past comments. Registration requirements are an unnecessary barrier of entry, only serving to waste time rather than providing any actual security benefits. Like proposal 5.3.1, we believe that this is a low-hanging fruit proposal that can increase the number of users.

5.3.3. Utilities should Utilize the 15/15 Rule, not the 15/100/15 Rule, for Decisions about Data Redaction Protecting Individual Customer Privacy for the ICA, GNA, and DDOR

We support this option and note that data privacy concerns can limit the ability of a developer. For example, in the initial Microgrid Incentive Program (“MIP”) application process, applicants were notified that a proposed Community Microgrid footprint must include at least 100 residential customers in order to receive accurate load data. Given the potential impact on application scoring of this solution, the workaround that has been developed is to use an average residential load profile instead. Therefore, we return to the initial Clean Coalition proposal raised in our Opening Comments Responding to Questions on Track 1 Phase 1 to allow for an “opt-out function (rather than opt-in) for ratepayers/developers that want to allow other groups to be able to learn from their experiences.”¹ The Clean Coalition concurs with a 2021 report by UC Berkeley School of Law’s Center for Law, Energy & the Environment (“CLEE”) and UCLA School of Law’s Emmett Institute on Climate Change and the Environment that recommends, “the Public Utilities Commission could revisit and expand the 2011 decision to systematically classify all types of customer data (such as billing information) for their accessibility/portability, determine whether utilities should create different data sets based on data required for certain DER applications, and grant customers clearer rights to share a more complete set of their data with third parties for any type of DER.”² Lastly, allowing the transparent flow of data will help

¹ CLEAN COALITION COMMENTS IN RESPONSE TO ADMINISTRATIVE LAW JUDGE’S RULING DIRECTING RESPONSES TO QUESTIONS ON TRACK 1 PHASE 1, at p . 14.

² DATA ACCESS for a Policy Report DECARBONIZED GRID Policy Solutions to Improve Energy Data Access and Drive the Clean and Resilient Grid of the Future, February 2021, Climate Change and Business Research Initiative, at p.26
law.berkeley.edu/wp-content/uploads/2021/02/Data-Access-for-a-Decarbonized-Grid-February-2021.pdf

improve issues with data quality and missing data, which currently require significant cleaning before data is usable.

5.4.1. Modify ICA Maps to Enable Straightforward Customer Creation of Limited Generation Profiles (LGPs)

The Clean Coalition supports this option, which can be developed alongside the inclusion of the Limit Generation Profile in the interconnection process. Downloading data will greatly increase the ability of developers to design a project and successfully navigate the interconnection process. However, as with the other proposals, if the underlying data being presented is erroneous, adding this option will take developers in the wrong direction.

5.4.2. Modify ICA Methodology to Make use of LGP Application Information

We support this option but note the same concern with the need for accurate results. See the responses above and the Clean Coalition's response to the Enphase Energy, LLC., Motion to Amend the Scoping Memo.

5.4.3. Create New Report that Includes ICA Results Appended to Current Rule 21 Quarterly Interconnection Report Which Allows for Comparison Between ICA Values and Quarterly Interconnection Timelines Report

We support this proposal as well, although it should be a far lower priority than other issues such as the need for results validation.

5.5.1. Develop New Reporting Aimed at Understanding the Frequency of Potentially Erroneous Zero Load ICA Values

The Clean Coalition supports this proposal. However, it is clear that the number of zero results is clearly erroneous, given that this is the result for over 30% of feeders in some of the IOU service territories. Rather than understanding the frequency of **potentially** erroneous zero results, the focus needs to be on **understanding why** the models produce zero Load ICA results and fixing the issues. Such a report is most valuable when the model is believed to be accurate and the number of zero results has been minimized. Given the clear understanding of both the IOUs and stakeholders that the Load ICA data is not close to accurate, comprehensive changes are needed prior to allocating capital for such a report. Otherwise, the report will show that the results of the Load ICA tool are inaccurate, which is already known.

5.5.2. Incorporate Load ICA Results into Internal IOU Energization Business Processes and Publish Metrics

The Clean Coalition supports this proposal, but only as a secondary measure when the accuracy of the Load ICA data/results is improved. Using capital to integrate knowingly inaccurate data is not a good use of limited capital.

V. ICA SUBPROPOSALS

The Clean Coalition supports proposals 6.1.4, 6.1.7, 6.1.8, 6.1.9, 6.1.10, and 6.1.15. Others, such as 6.1.12 and 6.1.13, may be beneficial, but are not all that necessary given the fundamental flaws with the data itself. We strongly believe that capital should be allocated to increase the accuracy of the data/results prior to focusing on glamour issues such as adding an x-axis or y-axis. Of course, providing additional detail is always useful, but doing so must not be a priority. Likewise, we support 6.2.1, 6.2.2, 6.2.5, and 6.3 and appreciate the thought put into the development of these options. Each of these proposals is of secondary importance to the need for accurate results for both Generation and Load ICA. Finally, from a practical standpoint, the ICA maps will be more useful if the spatial data can be downloaded in multiple formats (GEarth, geodatabases, etc...)³

VI. CONCLUSION

The Clean Coalition appreciates the opportunity to submit these opening comments. We look forward to continuing the conversation in our reply comments.

/s/ BEN SCHWARTZ
Ben Schwartz
Policy Manager
Clean Coalition
1800 Garden Street
Santa Barbara, CA 93101
Phone: 626-232-7573
ben@clean-coalition.org

Dated: May 29, 2024

³ So far, PG&E and SDG&E, allow users to download just ICA geodatabases, only after users create login credentials and/or request access, whereas SCE allows users to download KML, shapefile, XML and GeoJSON formats of ICA spatial data through its interactive ICA map.