



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

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

Rulemaking 21-06-017

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**MOTION OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E) TO
AUTHORIZE CERTAIN DISTRIBUTION PLANNING TOOL COSTS
AND INTEGRATION CAPACITY ANALYSIS COSTS TO BE
RECORDED TO THE DISTRIBUTION RESOURCE PLAN TOOLS
MEMORANDUM ACCOUNT (DRPTMA)**

KRISTIN CHARIPAR
BENJAMIN ELLIS

Pacific Gas and Electric Company
Law Department, 19th Floor
300 Lakeside Drive, Suite 210
Oakland, CA 94612
Telephone: (415) 265-2678
E-Mail: Ben.Ellis@pge.com

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Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

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Pursuant to Rule 11.1 of the California Public Utilities Commission (Commission) Rules of Practice and Procedure, Pacific Gas and Electric Company (PG&E) respectfully submits this motion for authorization to record certain distribution planning tool costs and Integration Capacity Analysis (ICA) costs to the Distribution Resource Plan Tools Memorandum Account (DRPTMA). As described herein, PG&E seeks to improve its distribution planning tools to enable transmission node mapping and to develop a platform by which the ICA tool will help streamline the load energization process for all customers requesting service. PG&E would like to begin work on these improvements and has proposed that the CPUC formally adopt these improvements to the distribution planning tools in this Rulemaking,¹ but it is unclear when authorization of these improvements will be approved. To avoid retroactive ratemaking, PG&E seeks authority here to record the costs associated with these improvements to the DRPTMA, which will be reviewed for reasonableness and cost recovery in the 2027 General Rate Case.

I. BACKGROUND

In Decision (D.) 18-02-004, the Commission authorized the investor-owned utilities to establish a memorandum account to track and incremental costs of implementing the Grid Needs Assessment (GNA), Distribution Deferral Opportunity Report (DDOR), and Data Access Portal,

¹ *Responses to Administrative Law Judge’s Ruling on Track 1 Phase 1 Questions By Pacific Gas and Electric Company (U 39 E)* (PG&E May Response), p. 10 (transmission node mapping), p. 21 (load energization ICA use case) (May 22, 2023).

with a sub-account to track the incremental costs of ICA and locational net benefits analysis (LNBA) implementation.² On March 19, 2018, PG&E filed advice letter 5255-E to establish the DRPTMA. Since 2018, the Commission has continued to review, refine, and update the GNA, DDOR, Data Access Portal, ICA, and LNBA, and provided authorization for PG&E to record the incremental costs associated with those updates to the DRPTMA.³ PG&E does not have authorization to record costs for improvements to these tools that are not specifically identified and approved by the Commission.

II. PROPOSAL TO RECORD COSTS FOR ENHANCEMENTS TO DISTRIBUTION PLANNING TOOLS TO ENABLE MAPPING OF TRANSMISSION CONGESTION NODES AMONG OTHER BENEFITS

In this proceeding, the Commission hired Kevala to perform an Electrification Impacts Study Part 1 (EIS Part 1) to examine the potential impacts of high adopts of DERs on the distribution grid, identifying where and when enhancements and investments could be needed. The EIS Part 1 “recommends that the distribution planning process should be able to map the transmission and distribution nodes that are at risk of large capacity grid infrastructure needs, as identified in this Part 1 Study, to enable a coordinated and integrated planning of grid infrastructure and mitigation strategies between the distribution and transmission planning processes.”⁴ PG&E supports this concept,⁵ and even recommended in previous comments in this proceeding, that the Commission adopt an order that the utilities consider the scope and cost of

² See Decision (D.) 18-02-004, Ordering Paragraph (OP) 2.n.

³ See Rulemaking (R.) 14-08-013, *Administrative Law Judge’s Ruling on Recommended Reforms for the Distribution Investment Deferral Framework Process*, issued June 21, 2021, p. 4 (adopted New Reform #1: “Costs related to any CPUC-required DRP data portal enhancements, incremental to GRC authorized amounts, may be tracked within the Distribution Resources Plan Memorandum Account (DRPTMA)”); see also R.21-06-017, *Administrative Law Judge’s Ruling Granting Joint Motion for Clarification on the Authority to Record Integration Capacity Analysis Refinement Costs*, p. 3, (Jan. 7, 2022) (authorized the investor-owned utilities “to track costs associated with refinements to their Integration Capacity Analysis (ICA) in their Distribution Resources Plan Memorandum Accounts, inclusive of any ICA refinements directed in R.21-06-017.”).

⁴ EIS Part 1, p. 123. Available online at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M508/K423/508423247.PDF>

⁵ See *Comments on the Electrification Impacts Study part 1 and Responses to Questions by Pacific Gas and Electric Company*, p. 10 (July 14, 2023)

transmission upgrades in its DPP where distribution upgrades that trigger related transmission upgrades that must be completed at the same time as the distribution upgrades.⁶

PG&E's current distribution planning tools currently cannot easily "map" the transmission and distribution nodes that are at risk of large capacity grid infrastructure needs, as recommended by Kevala, and desired by PG&E. This is because transmission planning and distribution planning are governed by separate regulatory processes which occur at different times, and thus result in using different vintages of the California Energy Commission's (CEC) newest Integrated Energy Policy Report (IEPR) demand forecast. In addition, as a result of the separate planning processes, each have historically relied on separate tools (distribution planning generally utilized LoadSEER, whereas transmission planning utilizing a tool called a TARA power flow analysis). Yet the distribution planning forecast plays an important role in the transmission planning process, by informing transmission planning where there are local areas with rapid growth and determining where distribution-driven transmission upgrades are needed. PG&E developed an in-house disaggregation tool to help translate distribution planning models for transmission planning, but this still does not enable easy 'mapping' of upgrade needs and requires substantial engineering time and resources.

PG&E would like to begin work to update its distribution planning tool, LoadSEER, to include a module for the transmission planning load forecast. If transmission planning can use inputs directly from the LoadSEER tool, it would enable transmission planning access to hourly load shapes at the substation level to help with grid needs mapping. As part of the LoadSEER tool enhancement, PG&E would seek to develop a map to read the outputs of the Transmission Planning Process annual studies to show thermal violation results, which can visually flag loaded lines and load pockets. These tool enhancements would alleviate the engineering labor hours spent on an-hoc processes, data manipulation, and in-house tool trouble shooting. PG&E estimates that such upgrades to the distribution planning tool would be between \$500k and

⁶ PG&E May Response at p. 10.

\$1.5M. As such, PG&E requests Commission authorization to record these distribution planning tool enhancements to the DRPTMA, which are subsequently subject to reasonableness review and approval.

III. PROPOSAL TO ENABLE A LOAD ENERGIZATION PROCESS USE CASE FOR ICA

In this proceeding, PG&E has also responded to questions concerning Load ICA use case and recommended using Load ICA to improve the load energization process.⁷ PG&E receives approximately 10,000 new load applications each year, mostly small to medium sized business applicants. These applicants primarily seek guidance on the cost and timing for distribution system upgrades, if applicable. Load ICA could be used as a part of PG&E's load energization service planning process to streamline the early stages of the load energization process/review.

Currently, ICA produces hosting capacity data based on the current state of the distribution network and does not model planned upgrades. Therefore, currently, line sections where hosting capacity results are close or equal to zero may already have planned capacity projects to address the issue. In some other cases, the maps might show available capacity, but there may be future planned load in the area. As a result, if a customer wants to understand whether there is capacity available for load interconnections, it must submit an application to PG&E's Service Planning Department. Under PG&E's existing process, Service Planning and Distribution Planning departments communicate and collaborate via ad-hoc emails, calls, and a formal review process to understand when an application triggers a primary distribution project upgrade and to develop a project timeline. Projects can experience delays due to the high volume of work and the manual nature of the Distribution Planning review process.

The new ICA use case is targeted to reduce processing time: to provide ready-to-use distribution capacity information that can shorten processing cycle times and streamline communication between the Service Planning and Distribution Planning departments. With this tool, PG&E is proposing a more efficient method for its service planning department to review

⁷ *Id.* at pp. 19-23.

all types of customers applications (residential, business, and EV customers). If the ICA tool is developed for this use case, PG&E will be able to communicate with the customers in a faster timeframe and a more efficient way, as well as review more applications in a shorter timeframe.⁸

PG&E's proposed new ICA use case would authorize PG&E to begin investment in a new IT platform that can provide ready-to-use visual data to both Service Planning and Distribution Planning. It will also provide a two-way communication channel for the two teams for further collaboration and data sharing, with respect to a specific customer load application. The proposed Load ICA use case will enable quick feedback from Service Planning to all types of customers that can facilitate market growth, removing barriers to entry, and provide them with necessary information faster to make critical decisions about their projects viability.

IV. REQUEST FOR AUTHORIZATION TO RECORD COSTS TO THE DRPTMA

As discussed above, PG&E does not have authorization to record costs to the DRPTMA unless specifically identified and authorized to do so by the Commission. PG&E has already put extensive thought into the distribution planning tool enhancements that will improve data integration to provide more useful information for planning, and as a result, better serve our customers. PG&E respectfully requests authorization to proceed with distribution planning tool enhancements to enable transmission node mapping, as well as authorizing a Service Planning Load ICA use case to streamline the load energization process for all customers requesting service. Once it is clear that PG&E has authorization to proceed with these distribution planning tool enhancements, it will begin work and record the costs to the DRPTMA and seek cost recovery in the 2027 General Rate Case after such costs are determined to be reasonable. PG&E believes the value of these tool enhancements are already supported by the record in this proceeding and warrant authorization in the near term, rather than waiting for a future decision or ruling.

⁸ PG&E Data Response to ICA Data Request No. ED_016-Q001-003 (Aug. 4, 2023); *see also generally Reply Comments by Pacific Gas and Electric Company (U 39 E) on Responses to the April 6, 2023 Ruling* (June 5, 2023).

V. CONCLUSION

For the reasons discussed herein, PG&E respectfully requests the Commission issue a ruling that authorizes distribution planning tool enhancements that can be recorded to the DRPTMA to enable transmission node mapping and the Service Planning Load ICA use case.

Respectfully submitted,

KRISTIN CHARIPAR
BENJAMIN ELLIS

By: /s/ Benjamin Ellis
BENJAMIN ELLIS

Pacific Gas and Electric Company
Law Department, 19th Floor
300 Lakeside Drive
Oakland, CA 94612
Telephone: (415) 265-2678
E-Mail: ben.ellis@pge.com

Attorneys for
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