

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 6058E
As of October 18, 2022

Subject: Advice Letter Modifying Electric Rule 21 Pursuant to Decision 20-09-035 for Working Group 2 and 3 Ordering Paragraphs 15 and 16 (due 120 Days from Issuance)

Division Assigned: Energy

Date Filed: 01-28-2021

Date to Calendar: 02-01-2021

Authorizing Documents: D2009035

Disposition:	Rejected
Effective Date:	None

Resolution Required: Yes

Resolution Number: E-5211

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

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(415) 973-4587
PGETariffs@pge.com

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov

January 28, 2021

Advice 6058-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Advice Letter Modifying Electric Rule 21 Pursuant to Decision 20-09-035 for Working Group 2 and 3 Ordering Paragraphs 15 and 16 (due 120 Days from Issuance)

Purpose

Pacific Gas and Electric Company (PG&E) hereby submits this Tier 3 Advice Letter (“AL”) to update Electric Rule 21 - *Generating Facility Interconnections* - in compliance with the California Public Utilities Commission (“CPUC”, “Commission”) Decision (“D.”) D.20-09-035¹ (“WG 2 & 3 Decision”) Ordering Paragraph (OP) 15 and OP 16 as described herein and to be submitted 120 days from the date D. 20-09-035 was issued.

Background**Rulemaking 17-07-007**

On July 13, 2017, The Commission adopted Order Instituting Rulemaking (R.) 17-07-007 to consider refinements to Electric Tariff Rule 21 of Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE) (jointly, Utilities) regarding the interconnection of distributed energy resources.²

¹ [Decision 20-09-035](#) - Date of Issuance 9/30/2020 - *Decision Adopting Recommendations from Working Groups Two, Three, and Subgroup*

² The Rule 21 tariff describes the interconnection, operating, and metering requirements for certain generating and storage facilities seeking to connect to the electric distribution system. Rule 21 provides customers access to the electric grid to install generating or storage facilities while protecting the safety and reliability of the distribution and transmission systems at the local and system levels. (See R.17-07-007 at p2.)

ACR Scoping Memo

On October 2, 2017, the Commission issued Scoping Memo of Assigned Commissioner and Administrative Law Judge (Scoping Memo) set forth the scope and schedule of the proceeding. It established the working group process, whereby resolution of the technical issues of the proceeding would be proposed by Working Groups One through Six. In addition, four issues were assigned to the Smart Inverter Working Group (SIWG), including issues 5 and 6.³

Working Group 2

On February 14, 2018, a Ruling directed that Working Group Two would begin on March 15, 2018 and required that it subsequently file its recommendations report on September 15, 2018. The Ruling also reassigned Issue 6 to Working Group Two.

On August 15, 2018, the Administrative Law Judge issued a Ruling allowing additional time for Working Group Two to resolve issues, including sub-issues encountered, and delaying the filing of the recommendations report to October 31, 2018.

On October 31, 2018, the Working Group 2 final report was issued.⁴

On November 7, 2018, the Administrative Law Judge facilitated a workshop to discuss the recommendations provided in the Working Group 2 Final Report.

On December 7, 2018, in response to the November 7, 2018, workshop on the Working Group Two Report, and parties were directed to respond to questions on the report.

On February 1, 2019, responses to the questions, along with comments on the Working Group Report, were filed by the various parties

On February 22, 2019, replies were filed by the various parties.

Amended Scoping Memo and Working Group 3

On November 16, 2018, a Scoping Memo and Ruling (Amended Scoping Memo) delayed the start of Working Group Three until December 1, 2018 and required Working Group Three to file its recommendations report on June 14, 2019. The Amended Scoping Memo also decreased the number of working groups and redistributed issues across two

³ The Smart Inverter Working Group (SIWG) grew out of a collaboration between the Commission and the California Energy Commission in early 2013. The collaboration identified the development of advanced inverter functionality as an important strategy to mitigate the impact of high penetrations of distributed energy resources. [as explained in footnote 2 in D. 20-09-035]

⁴ Working Group Two Final [Report](#) filed jointly by the Utilities.

working groups and the Interconnection Discussion Forum⁵ such that Working Group Three was assigned issues 12, 15, 16, 20, 22, 23, 24, 27 28, and New Issues A and B.

On June 13, 2019, the Working Group Three Final Report⁶ was issued followed by a workshop.

A November 27, 2019 Ruling directed parties to respond to questions on the Working Group Three Report.

On January 13, 2020, the various parties filed responses to the questions contained in the November 27, 2019, ruling, along with comments to the Working Group Three Report.

On January 27, 2020, various parties filed replies to the responses and Working Group Three Report comments.

On January 13, 2020, various parties filed replies to the comments on the V2G AC subgroup report.

Vehicle to Grid Subgroup

An August 23, 2019 Ruling issued in R. 17-07-007 and in R.18-12-006 (the *Rulemaking to Continue the Development of Rates and Infrastructure for Vehicle Electrification*) established the V2G AC Subgroup with meetings to begin on September 11, 2019. The purpose of this subgroup is to discuss and identify existing standards to fulfill safety requirements for the interconnection of mobile inverters. The ruling directed a final recommendations report from the subgroup to be filed on December 6, 2019.

A workshop on the subgroup report was held on December 17, 2019.

On December 11, 2019, the V2G Final Report was issued⁷.

On January 13, 2020, various parties filed replies to the comments on the V2G AC subgroup report.

Additionally on December 15, 2020, January 7, 2021, and January 21, 2021, at the SIWG meetings there were discussions on Issue 9 pursuant to OP 15 and related to this Advice Letter.

⁵ In Resolution Administrative Law Judge-347, the Commission established the Interconnection Discussion Forum (formerly known as the Rule 21 Working Group) as a venue to encourage discussion and collaboration between the Utilities and developers. [as explained in footnote 3 in D. 20-09-035]

⁶ Working Group Three Final [Report](#) filed by SDG&E.

⁷ Final [Report](#) of the Vehicle to Grid Alternating Current Interconnection Subgroup.

Decision 20-09-035

On August 20, 2020, a proposed decision was issued on Working Groups Two and Three. On September 9, 2020 comments were received. On September 22, 2020, replies were received.

On September 24, 2020, the Commission voted out D.20-09-035. D.20-09-035 addressed the recommendations of Working Groups Two and Three and the Vehicle-to-Grid Alternating Current Interconnection Subgroup (V2G AC Subgroup).

Working Group One Advice letters were submitted⁸ and are not yet approved, so changes are pending on Rule 21.⁹

On October 30th, PG&E submitted AL 5988-E¹⁰, a Tier 1 AL 30 days after the issuance of D. 20-09-035, as ordered by that decision. That advice letter was protested and has been suspended.

On November 30th, PG&E submitted AL 6014-E¹¹, a Tier 2 AL 60 days after the issuance of D. 20-09-035, as ordered by that decision. That advice letter was protested and has been suspended.

Concurrent with this advice letter PG&E is submitting Tier 2 AL 5915-E to address Ordering Paragraphs 5, 6, 8 and 11 as laid out in the table in OP 55 (as corrected by D. 21-01-027¹²).

Overview

D. 20-09-035 addresses the recommendations of Working Groups Two and Three and the Vehicle-to-Grid Alternating Current Interconnection Subgroup. OP 16 requires the Utilities to submit specifics of whether reductions to a customer's Limited Generation Profile are needed, and if so, how are they determined. In addition, OP 16 requires a description of how the Utilities will implement OP 15.

⁸ [AL 5553-E](#) *Modification to Rule 21 Pursuant to the Working Group 1 D. 19-03-013*. The Rule 21 changes in AL 5553-E is still pending approval. Two other Advice letters (AL 5583-E, and AL 5584-E) were also submitted for Working Group 1 but they did not impact Rule 21.

⁹ Draft Resolution E-5031 is in comment period, and would adopt modifications to Electric Rule 21, Generating Facility Interconnections, Pursuant to Decision 19-03-013.

¹⁰ [AL 5988-E](#) *Advice Letter Modifying Electric Rule 21 Pursuant to Decision 20-09-035 for Working Group 2 and 3*

¹¹ [AL 6014-E](#) *Advice Letter Modifying Electric Rule 21 Pursuant to Decision 20-09-035 for Working Group 2 and 3 (due 60 Days from Issuance) 3*

¹² [D. 21-01-027](#) - *Order Correcting Errors In Decision 20-09-035 – issued January 21, 2021.*

OP 15 and 16 require:

15. The counter proposal from Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (Utilities) to resolve **Issue 9** is adopted with modification.

Within 90 days of the issuance of this decision, Utilities shall **commence discussions with the Smart Inverter Working Group** focused on implementing the proposal.

Within six months of issuance of this decision, Utilities shall submit a Tier 3 Advice Letter providing recommendations (as applicable) regarding the standard review, certification requirements, and interconnection processes necessary for implementation of the proposal.

Within 60 days of adoption of a certification scheme for the Limited Generation Profile, Utilities shall modify the Rule 21 Interconnection Application Process to allow a distributed energy resources customer to include a Limited Generation Profile with their application, require the customer to enable generation profile limiting functionality, and allow Utilities opportunity to alter the profile if safety and reliability concerns warrant it.

Retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application.

As part of the proposal, Utilities shall:

- i) allow customers to utilize a smart inverter's ability to increase its output on a monthly basis; and
- ii) use a 10 percent buffer, which shall be revisited.

No later than 18 months after the implementation of this proposal, Utilities shall submit a Tier 3 Advice Letter providing data obtained from Proposals 8b and 8c, adopted below, assessing the effectiveness of the use of the Integration Capacity Analysis values within the interconnection process and addressing whether the Commission should continue use of the 10 percent buffer or adjust it, based on the data.

16. Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company (Utilities) shall **submit a Tier 3 Advice Letter no later than 120 days from the issuance of this decision providing the**

specifics of whether and how reductions to a customer's Limited Generation Profile are determined.

The Advice Letter shall include a **description of how the Utilities will implement Ordering Paragraph 15.**

The final resolution of the Advice Letter will be implemented simultaneously with the counter proposal for Issue 9, adopted in Ordering Paragraph 15.

Discussion

Implementing OP 15

In OP 15, the Commission adopted the counter proposal to resolve Issue 9¹³ with modification¹⁴. The requirements of OP 15 are set forth below:

- Commence discussions with the SIWG.
- Within six months of issuance of this decision, submit a Tier 3 Advice Letter providing recommendations (as applicable) regarding the standard review, certification requirements, and interconnection processes necessary for implementation of the proposal.
- Within 60 days of adoption of a certification scheme for the Limited Generation Profile, Utilities shall modify the Rule 21 Interconnection Application Process to allow a distributed energy resources customer to include a Limited Generation Profile with their application, require the customer to enable generation profile limiting functionality, and allow Utilities opportunity to alter the profile if safety and reliability concerns warrant it.

The Utilities met with the SIWG on December 15, 2020 and January 7, 2021 to discuss implementing the Issue 9 proposal. The Utilities propose continued, ongoing discussions to achieve consensus with the SIWG. The Utilities will submit supplemental advice letters incorporating the outcome of the discussions.

¹³ Issue 9 is *What conditions of operations should the Commission adopt in interconnection applications and agreements to allow distributed energy resources to perform within existing hosting capacity constraints and avoid triggering upgrades?* (See D. 20-09-035 p 8)

¹⁴ D. 20-09-035 p 55, "Accordingly, we adopt the Utilities' counter proposal to resolve Issue 9, with the modification to allow the frequency of changes to be monthly versus seasonal, which will take advantage of the Integration Capacity Analysis. Allowing a customer to establish scheduled outputs aligns the Issue 9 proposal with the Integration Capacity Analysis. Further, as described below, allowing a customer to establish monthly scheduled output limits strikes a balance between the proposed schedule and the more conservative seasonal schedule recommended in the counter proposal."

The Tier 3 advice letter to be submitted pursuant to OP 15 will describe how a Limited Generation Profile can be evaluated and studied in the interconnection process.

Whether and How Reductions to a Customer's Limited Generation Profile Are Determined

OP16 seeks to clarify the modification process for a customer's Limited Generation Profile subsequent to the Interconnection process outlined within OP15. Many of the implementation details of the Limited Generation Profile determined within OP15 have not been finalized, and discussions with the SIWG are still ongoing.

The Utilities have identified several initial factors could contribute to a customer's revised Limited Generation Profile. Some of these factors could include:

- The Utilities need to reduce generation to ensure safe and reliable service without grid updates.
- Future grid conditions resulting in actual hosting capacity being below the published Integration Capacity Analysis-SG.
- A determination by the utility that the system does not operate as approved. For example, there is no buffer or the actual buffer is determined to be less than 10%.

The factors above are subject to change based on the outcome of upcoming preplanned discussions on this topic.

Protests

*****Due to the COVID-19 pandemic and the shelter at home orders, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com*****

Any party wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than February 17, 2021, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to General Order (GO) 96-B, Rule 5.3, (and **OP 15 and 16 of D.20-09-035**), this advice letter is submitted with a Tier 3 designation. PG&E requests that this **Tier 3** advice submittal become effective upon Commission approval.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.17-07-007 (Rule .21), R. 14-07-002 (NEM Successor) and R.19-09-009 (Microgrid). Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Erik Jacobson
Director, Regulatory Relations

cc: Service List R.17-07-007
Service List R.14-07-002
Service List R.19-09-009

Attachments



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U 39 E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Stuart Rubio

Phone #: (415) 973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: SHR8@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6058-E

Tier Designation: 3

Subject of AL: Advice Letter Modifying Electric Rule 21 Pursuant to Decision 20-09-035 for Working Group 2 and 3 Ordering Paragraphs 15 and 16 (due 120 Days from Issuance)

Keywords (choose from CPUC listing): Compliance

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.20-09-035

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: N/A

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date:

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison
Schneider & Harris LLP Energy
Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie

Green Power Institute
Hanna & Morton
ICF

IGS Energy
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy