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June 17, 2011

**Advice 3864-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California (CPUC)

**Subject: Establishment of an Interim Interconnection Procedure for Rule 21  
Qualifying Facilities Signing New PURPA Power Purchase  
Agreements With PG&E**

**Purpose**

Pacific Gas and Electric Company ("PG&E") hereby submits for filing revisions to its Electric Tariff Rule 21 ("Rule 21"). PG&E's proposed revisions and the affected tariff sheets are included in Attachment 1.

**Request for Authorization**

This advice letter addresses the anticipated need for an updated interconnection procedure once the Qualifying Facility and Combined Heat and Power Settlement ("QF/CHP Settlement") approved in Decision ("D.") 10-12-035 and/or the Assembly Bill ("AB") 1613 program (AB 1613 Program)<sup>1</sup> become effective. Changes to these procedures will be necessary to ensure timely, cost-effective, and transparent interconnection rules going forward. The current Rule 21 does not adequately address key requirements for interconnecting a Qualifying Facility ("QF") set up in accordance with the Public Utility Regulatory Policies Act ("PURPA"), with all its export output sold to PG&E under a PURPA power purchase agreement ("PURPA QF interconnections"). For the reasons summarized below, PG&E is hereby asking the Commission to exercise its jurisdiction and require that any new PURPA QF interconnections use the existing California Independent System Operator ("CAISO") or Wholesale Distribution Tariff ("WDT") interconnection procedures on an interim basis. This proposal is not intended to call into question the CPUC's jurisdiction over PURPA QF interconnections. Instead, as described in more detail below, interim use of the CAISO and WDT

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<sup>1</sup> Advice 3696-E-A, "Establishment of Standard Contracts and Tariffs for Purchase of Excess Electricity From Eligible Small Combined Heat and Power Facilities," was submitted to the Commission on January 31, 2011.

processes and rules would allow the interconnection process to proceed efficiently for new QF PURPA procurement programs. It would also give the Commission the time needed to investigate the best interconnection procedures for these generators, either through an updated Rule 21, continued use of the CAISO/WDT processes, or a hybrid approach.

## **Background**

Over fifteen years have passed since PG&E last entered into any new PURPA QF interconnection agreements under Rule 21. During that time, there have been a number of important changes in the requirements for Generating Facility interconnection and grid management.

First, significant market changes have occurred as a result of the CAISO assuming operational control of the California grid and responsibility for generator interconnections to the transmission system. The CAISO and the investor-owned utilities (“IOUs”) have implemented, and the Federal Energy Regulatory Commission (“FERC”) has approved, a number of key changes in the management and coordination of the interconnection queues at both distribution and transmission levels. Rule 21 does not appropriately provide for coordination among PG&E, the CAISO or any other affected transmission or distribution systems. PG&E expects that some QFs will interconnect at the transmission level<sup>2</sup> and clear rules for how coordination among these parties and their respective interconnection processes do not exist under Rule 21.

Second, the CAISO procedures address certification for Resource Adequacy credit for eligible QFs. Rule 21 has no provisions to obtain the CAISO Deliverability Studies that are an essential component to qualify for Resource Adequacy.

Third, Commission-approved interconnection forms and agreements now available under Rule 21 cover only non-export interconnections<sup>3</sup> and retail net metering projects. There are currently no forms designed for the interconnection of projects making PURPA QF sales to PG&E. When PURPA QFs last interconnected in the 1990s, a more generic Rule 21 was generally incorporated into the individual PURPA QF PPAs. Now Rule 21 incorporates stand-alone, *pro forma* interconnection agreements targeted for specific types of interconnections such as non-export or various types of net metering. There is currently no Commission-approved *pro forma* interconnection

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<sup>2</sup> PURPA QFs up to 20 megawatts (“MW”) are anticipated to include distribution and transmission interconnections, particularly in PG&E’s service territory where transmission level voltage is generally above 60 kilovolt (“kV”). PG&E’s voltage level demarcation between distribution and transmission is significantly lower than that for Southern California Edison. As a consequence, larger PURPA QFs that interconnect with PG&E will likely be at transmission levels whereas for SCE they will more likely be at distribution levels. Over the last fifteen years, however, the Rule 21 language has evolved significantly, but its evolution has been focused on distribution interconnections primarily designed to serve onsite load – not the more export focused transmission and distribution level interconnections that PG&E expects to see as new PURPA QF generators come on line.

<sup>3</sup> PG&E has forms to accommodate uncompensated inadvertent export for certain smaller generators.

agreement for use with PURPA QFs that can present a wider range of operating conditions and larger impact on the grid.

### **Proposed Interim Proposal**

To address the advent of the CAISO, the need for deliverability studies, coordination with the existing interconnection queues at both transmission and distribution and the need for Commission-approved forms, Rule 21 would need to be significantly amended to accommodate new PURPA QFs. For this reason, PG&E is asking for Commission approval to use FERC-approved CAISO and WDT interconnection rules, procedures and forms for PURPA QFs on an interim basis.

This interim approval will allow interconnections to proceed while stakeholders conduct a more thorough review of long-term options and revisions for Rule 21. In the past the Commission has utilized a “Rule 21 Working Group” to develop uniform statewide revisions to Rule 21. While PG&E had hoped for guidance from the Rule 21 Working Group on PURPA QF interconnections, this group only recently reconvened on April 29, 2011,<sup>4</sup> after a three-year hiatus, as a part of Rulemaking (“R.”)10-05-004. PG&E is optimistic that long-term solutions regarding QF interconnections will result from the Rule 21 Working Group, and we are looking forward to seeing the new agenda topics, priorities and schedules. One of the strengths of the working group approach is that it is a transparent process that includes representatives from the regulatory community, industry and the utilities. However, complex issues take time to resolve, so all stakeholders should anticipate that the working group would need sufficient time to work through the many Rule 21 changes required to support PURPA QF interconnections.

Finally, interim use of the FERC-approved CAISO and WDT interconnection procedures available through the CAISO tariff for transmission and PG&E’s wholesale distribution tariff for distribution has several advantages. The CAISO and WDT procedures are well established and will be familiar to many applicants, have been vetted by stakeholders including the generation community and, most importantly, will ensure a level of consistency between the interconnection procedures for PURPA QFs and other wholesale generators.<sup>5</sup>

For these reasons, PG&E requests Commission approval to allow PG&E to use the CAISO and WDT procedures, rules and applications for all new PURPA QFs for an interim period. Accordingly, this Advice Letter modifies PG&E’s Electric Rule 21 by including language directing PG&E to use the applicable currently effective CAISO or

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<sup>4</sup> After 7 years of sponsoring Rule 21 Working Group meetings, the California Energy Commission (“CEC”) held a final meeting on May 15, 2007. On May 15, 2008, in R.08-03-008 a *Scoping Memo and Ruling of the Assigned Commissioner and Administrative Law Judge* included the guidance that the CPUC “consider the ongoing work of [the Rule 21 Working Group]...” and directed the Energy Division to conduct a workshop. That single workshop was held on June 20, 2008.

<sup>5</sup> Also, an added advantage for generators is that network upgrade charges under FERC interconnection procedures are refunded, unlike the treatment under Rule 21.

WDT interconnection procedures for the interconnection of any new PURPA QF generators.

### **Tariff Revisions**

PG&E adds the following language to Rule 21, Section A, "Applicability," authorizing the use of FERC's interconnection procedures (SGIP/LGIP/GIP/WDT), rules and applications on an interim basis:

*For an interim period until otherwise ordered by the Commission, the Commission directs PG&E to use the currently effective interconnection procedure contained in the California Independent System Operator's (CAISO) tariff or PG&E's Wholesale Distribution Tariff (WDT) for applicants for the interconnection of a Generating Facility that has contracted to sell or intends to sell all its exports to the grid to PG&E under a Public Utility Regulatory Policies Act (PURPA) power purchase agreement. A net energy metering (NEM) customer's generating facility is exempt from this provision and may be interconnected pursuant to the other provisions of this Rule.*

### **Protests**

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **July 7, 2011**, which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division  
Tariff Files, Room 4005  
DMS Branch  
505 Van Ness Avenue  
San Francisco, California 94102

Facsimile: (415) 703-2200  
E-mail: [jjn@cpuc.ca.gov](mailto:jjn@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto:mas@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 also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry  
Vice President, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, California 94177

Facsimile: (415) 973-6520  
E-mail: PGETariffs@pge.com

**Effective Date**

PG&E requests that this Tier 3 advice filing 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 service lists for R.08-06-024, A.08-11-001, and R.10-05-004. Address changes to the General Order 96-B service list should be directed to 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. Advice letter filings can also be accessed electronically at <http://www.pge.com/tariffs>.

Handwritten signature of Brian Cherry in cursive script.

Vice President - Regulation and Rates

cc: Service Lists R.08-06-024, A.08-11-001, R.10-05-004

Attachments

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

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

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 M)**

Utility type:

- ELC       GAS  
 PLC       HEAT       WATER

Contact Person: Linda Tom-Martinez

Phone #: (415) 973-4612

E-mail: lmt1@pge.com

EXPLANATION OF UTILITY TYPE

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

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **3864-E**

**Tier: 3**

Subject of AL: Establishment of an Interim Interconnection Procedure for Rule 21 Qualifying Facilities Signing New PURPA Power Purchase Agreements With PG&E

Keywords (choose from CPUC listing): Agreements, Rules

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

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<sup>1</sup>: \_\_\_\_\_

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for:

Confidential information will be made available to those who have executed a nondisclosure agreement:  Yes  No

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: \_\_\_\_\_

Resolution Required?  Yes  No

Requested effective date: **Upon Commission Approval**

No. of tariff sheets: 3

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: Electric Rule 21

Service affected and changes proposed<sup>1</sup>: N/A

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

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

**CPUC, Energy Division**

**Tariff Files, Room 4005**

**DMS Branch**

**505 Van Ness Ave.,**

**San Francisco, CA 94102**

**jnj@cpuc.ca.gov and mas@cpuc.ca.gov**

**Pacific Gas and Electric Company**

**Attn: Brian Cherry**

**Vice President, Regulation and Rates**

**77 Beale Street, Mail Code B10C**

**P.O. Box 770000**

**San Francisco, CA 94177**

**E-mail: PGETariffs@pge.com**

**ATTACHMENT 1  
Advice 3864-E**

**Cal P.U.C.  
Sheet No.**

**Title of Sheet**

**Cancelling Cal  
P.U.C. Sheet No.**

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30481-E	ELECTRIC RULE NO. 21 GENERATING FACILITY INTERCONNECTIONS Sheet 1	23678-E*
30482-E	ELECTRIC TABLE OF CONTENTS Sheet 1	30371-E
30483-E	ELECTRIC TABLE OF CONTENTS RULES Sheet 20	29908-E



**ELECTRIC RULE NO. 21**  
**GENERATING FACILITY INTERCONNECTIONS**

Sheet 1

A. Applicability

Applicability. This Rule describes the Interconnection, operating and Metering requirements for Generating Facilities to be connected to Pacific Gas and Electric's (PG&E) Distribution System over which the California Public Utilities Commission (Commission) has jurisdiction. Subject to the requirements of this Rule, PG&E will allow the Interconnection of Generating Facilities with its Distribution System.

For an interim period until otherwise ordered by the Commission, the Commission directs PG&E to use the currently effective interconnection procedure contained in the California Independent System Operator's (CAISO) tariff or PG&E's Wholesale Distribution Tariff (WDT) for applicants for the interconnection of a Generating Facility that has contracted to sell or intends to sell all its exports to the grid to PG&E under a Public Utility Regulatory Policies Act (PURPA) power purchase agreement. A net energy metering (NEM) customer's generating facility is exempt from this provision and may be interconnected pursuant to the other provisions of this Rule.

(N)  
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 (N)

Definitions. Capitalized terms used in this Rule, and not defined in PG&E's other tariffs, shall have the meaning ascribed to such terms in Section H of this Rule. The definitions set forth in Section H of this Rule shall only apply to this Rule and may not apply to PG&E's other tariffs.

Consistent with IEEE 1547, this Rule has been revised to be consistent with the requirements of ANSI/IEEE<sup>1</sup> 1547-2003 *Standard for Interconnecting Distributed Resources with Electric Power Systems* (IEEE 1547). In some cases, IEEE 1547 language has been adopted directly, in others, IEEE 1547 requirements were interpreted and this Rule's language was changed to maintain the spirit of both documents.

Language from IEEE 1547 that has been adopted directly (as opposed to paraphrased language or previous language that was determined to be consistent with IEEE 1547) is followed by a citation that lists the clause from which the language derived. For example, IEEE1547-4.1.1 is a reference to Clause 4.1.1.

In the event of any conflict between this Rule and any of the standards listed herein, the requirements of this Rule shall take precedence.

B. General Rules, Rights and Obligations

1. Authorization Required to Operate. A Producer must comply with this Rule, execute an Interconnection Agreement with PG&E, and receive PG&E's express written permission before Parallel Operation of its Generating Facility with PG&E's Distribution System. PG&E shall apply this Rule in a non-discriminatory manner and shall not unreasonably withhold its permission for Parallel Operation of Producer's Generating Facility with PG&E's Distribution System.

<sup>1</sup> ANSI – American National Standards Institute, IEEE – Institute of Electrical and Electronic Engineers.

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Advice Letter No: 3864-E  
 Decision No.

Issued by  
**Brian K. Cherry**  
 Vice President  
 Regulation and Rates

Date Filed June 17, 2011  
 Effective \_\_\_\_\_  
 Resolution No. \_\_\_\_\_



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 Resolution No. \_\_\_\_\_

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

AT&T	Dept of General Services	Northern California Power Association
Alcantar & Kahl LLP	Douglass & Liddell	Occidental Energy Marketing, Inc.
Ameresco	Downey & Brand	OnGrid Solar
Anderson & Poole	Duke Energy	Praxair
Arizona Public Service Company	Dutcher, John	R. W. Beck & Associates
BART	Economic Sciences Corporation	RCS, Inc.
Barkovich & Yap, Inc.	Ellison Schneider & Harris LLP	Recurrent Energy
Bartle Wells Associates	Foster Farms	SCD Energy Solutions
Bloomberg	G. A. Krause & Assoc.	SCE
Bloomberg New Energy Finance	GLJ Publications	SMUD
Boston Properties	GenOn Energy, Inc.	SPURR
	Goodin, MacBride, Squeri, Schlotz & Ritchie	San Francisco Public Utilities Commission
Braun Blaising McLaughlin, P.C.	Green Power Institute	Santa Fe Jets
Brookfield Renewable Power	Hanna & Morton	Seattle City Light
CA Bldg Industry Association	Hitachi	Sempra Utilities
CLECA Law Office	In House Energy	Sierra Pacific Power Company
CSC Energy Services	International Power Technology	Silicon Valley Power
California Cotton Ginners & Growers Assn	Intestate Gas Services, Inc.	Silo Energy LLC
California Energy Commission	Lawrence Berkeley National Lab	Southern California Edison Company
California League of Food Processors	Los Angeles Dept of Water & Power	Spark Energy, L.P.
California Public Utilities Commission	Luce, Forward, Hamilton & Scripps LLP	Sun Light & Power
Calpine	MAC Lighting Consulting	Sunshine Design
Cardinal Cogen	MBMC, Inc.	Sutherland, Asbill & Brennan
Casner, Steve	MRW & Associates	Tabors Caramanis & Associates
Chris, King	Manatt Phelps Phillips	Tecogen, Inc.
City of Palo Alto	McKenzie & Associates	Tiger Natural Gas, Inc.
City of Palo Alto Utilities	Merced Irrigation District	TransCanada
Clean Energy Fuels	Modesto Irrigation District	Turlock Irrigation District
Coast Economic Consulting	Morgan Stanley	United Cogen
Commercial Energy	Morrison & Foerster	Utility Cost Management
Consumer Federation of California	NLine Energy, Inc.	Utility Specialists
Crossborder Energy	NRG West	Verizon
Davis Wright Tremaine LLP	Navigant Consulting	Wellhead Electric Company
Day Carter Murphy	Norris & Wong Associates	Western Manufactured Housing Communities Association (WMA)
		eMeter Corporation
Defense Energy Support Center	North America Power Partners	
Department of Water Resources	North Coast SolarResources	