STATE OF CALIFORNIA | EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

April 16, 2014

Jane K. Yura, VP, Regulation and Rates
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10B
P.O. Box 770000
San Francisco, CA 94177

Re: Rejection of PG&E Advice Letter 3719-E, filed August 16, 2010

Dear Ms. Yura:

This is to notify you that Energy Division is rejecting Advice Letter (AL) 3719-E without prejudice.

Ordering Paragraph (OP) 26 in D.09-08-027 ordered the utilities to file proposals with the Commission to make at least one new or existing demand response program or option within a program comply with the 10-minute dispatch notification time requirements for participation in the CAISO's ancillary services market as either Proxy Demand Resource or Participating Load. PG&E filed Advice Letter 3719-E on August 16, 2010 in response to OP 26. The advice letter contains a variety of proposals with the caveat that the ideas put forth are subject to change depending on developments in CPUC and FERC proceedings. PG&E states that any formal requests for demand response programs with a 10-minute dispatch notification component will be contained in its demand response application for 2012-2014.

PG&E filed its 2012-2014 demand response application in March 2011 (A.11-03-001) and it contained a demand response pilot proposal called the Intermittent Resource Management 2 or "IRM2". D.12-04-045 subsequently approved the majority of PG&E's demand response application, including the IRM2 pilot proposal. The IRM2 pilot enables market participants (aggregators, energy service providers, community choice aggregators and end-use customers) to gain experience bidding demand response in CAISO wholesale energy markets. While the pilot is currently focused on day-ahead and real-time energy markets, it is expected to launch a second phase that includes ancillary services such as day-ahead non-spin and real-time non-spin.[1] These anticipated ancillary services require 10-minute dispatch or less, and hence effectively comply with the requirements of OP 26 of D.09-08-027.

Therefore the Commission's approval of the IRM2 pilot makes AL 3719-E moot and it is therefore rejected without prejudice.

Sincerely,

Cynthia Walker for EFR

Edward Randolph
Director, Energy Division

cc: Shirley Wong, PG&E

[1] PG&E's IRM2 presentation to Energy Division dated December 17, 2013

Pacific Gas and Electric Company™

**Jane K. Yura**
Vice President
Regulation and Rates

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Fax: 415.973.6520

August 16, 2010

**Advice 3719-E**
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject**: **PG&E's Proposal for the Provision of Ancillary Services as Proxy Demand Response**

## Purpose

On August 20, 2009, the California Public Utilities Commission (Commission) issued Decision (D.) 09-08-027 (Decision) adopting Demand Response (DR) Activities and Budgets for 2009 through 2011. The Decision approved utility DR programs, funding, and cost recovery mechanisms. Ordering Paragraph (OP) 26 of the Decision states that:

> *"Within 30 days of the approval of CAISO's Proxy Demand Resource tariff by the Federal Energy Regulatory Commission, each utility shall file a proposal with the Commission to make at least one new or existing demand response program or option within a program comply with the 10-minute dispatch notification time requirements for participation in the CAISO's ancillary services market as either Proxy Demand Resource or Participating Load."*

The Federal Energy Regulatory Commission (FERC) approved the California Independent System Operator's (CAISO) Proxy Demand Resource (PDR) tariff amendments on July 15, 2010, thus the Pacific Gas and Electric Company's (PG&E) filing of this Advice Letter (AL) is timely and in compliance with OP 26.

## Background

PG&E plans to modify some of its existing retail DR programs and enter into new bilateral contracts that have a 10-minute response requirement, so these existing and new programs would be able to be bid into the CAISO's Ancillary Service (A/S) markets. PG&E envisions utilizing the CAISO's new PDR product as the mechanism to provide A/S from DR resources. At the current time, PG&E does not foresee utilizing the CAISO's Participating Load (PL) model that was used for PG&E's 2009 PL Pilot. A formal request for approval of DR programs for A/S, along with details of these 10-minute response options, will be included in PG&E's 2012 – 2014 Application for DR Programs and Budgets (DR Application) to be filed on January 30, 2011. The DR Application will seek approval for at least one retail A/S tariff for implementation in the summer of 2012. The proposal is outlined below.

PG&E is in the process of developing its internal infrastructure and processes to be able to participate in the CAISO markets using the PDR mechanism. PG&E has taken a two phase approach in this development activity. First, PG&E's systems will be ready to bid into the day-ahead energy market into the CAISO markets by Fall 2010. Second, PG&E will continue development of its internal infrastructure and processes to facilitate the provision of A/S and the participation of non-PG&E demand response providers (DRP). The development of this infrastructure and processes is highly dependent of the outcome of the DR Order Instituting Rulemaking (OIR) Phase 4 proceeding. PG&E is expecting a decision in this proceeding in 2011 and is planning on finalizing its PDR infrastructure in time to participate in the CAISO markets with full scale programs by 2012.

**Proposals**

PG&E's new A/S programs are currently planned to be based on one or more of the approaches listed below. The details in the DR Application may differ from those outlined below depending on the outcome of concurrent FERC and Commission proceedings and PG&E's further evaluation on this subject between August 2010 and January 2011.

**A Program for Large C&I Customers Based on the 2009 Pilot**

In 2009, PG&E conducted a Participating Load (PL) pilot to develop technologies and internal processes to be able to bid non-spinning A/S into the CAISO markets. The findings of the pilot were documented and published in December 2009. PG&E is planning on building on this experience to develop an option within its PeakChoice™ program and Capacity Bidding Program (CBP). These options will have a 10 minute response requirement.

Several factors will influence the incentives to be paid for these options:

(1) the observed A/S prices in the CAISO spinning and non-spinning reserves market;
(2) the possible changes to the incentive levels paid for participation in the other existing options within PG&E's DR programs as part of the DR Application; and
(3) the willingness and capability of the customers to provide fast DR.

PG&E is assuming that the Commission will count the Resource Adequacy value of a 10-minute response resource in a manner consistent with the methodologies used to calculate other DR resources. Thus, it would be consistent that the pricing of a 10-minute response option in PeakChoice would pay customers more than the existing 30-minute notification option given the increased operational flexibility offered by a 10-minute response option.

PG&E may ask for additional funding for the possible modification of its IT systems to facilitate the operation of the 10-minute response options.

**Aggregators for the Provision of A/S**

On April 28, 2010, PG&E requested permission to hold a competitive solicitation with aggregators for additional DR in the 2012 to 2016 time frame.[1] The next round of aggregator contracts will be structured to match the requirements for participation in the CAISO markets. For example, the contracts will need to have components to allow customers to be called locationally. Beyond differentiating the offers for DR by location, PG&E will ask for bids for fast response products that it will be able to bid into the CAISO A/S markets.

**Required Enabling Technology**

Aside from the proposed A/S portfolio structures and offerings, PG&E will also be proposing additional technology incentives (i.e., communication, control, and monitoring) to advance the ability for demand side resources to offer A/S. Highlighted below are some of the areas PG&E will concentrate on for A/S products.

***Notification***

Notification for A/S purposes will be achieved using the AutoDR technology. The 2009 PL pilot demonstrated that this technology will meet the technical requirements for the provision of non-spinning reserves. PG&E is currently working on developing incentive programs that will enable customers and aggregators to participate in the AutoDR program and receive incentives for building the connectivity between the CAISO and the customer facility for notification purposes. PG&E is planning on proposing that the AutoDR program for the 2012-2014 program cycle will cover the costs of such connectivity up to a pre-specified amount for the provision of A/S.

***Telemetry***

Tariff and operational requirements set forth by the CAISO require each resource offering A/S to transmit operational telemetry data within 4 seconds. The 2009 PL pilot has shown that it is technically possible to meet the telemetry requirements for the provision of spinning and non-spinning reserves on a premise level for DR participants, although such technology is still expensive. PG&E will consider proposing an incentive program to be made available to its customers in order to cover such costs. PG&E may need to provide incentives for telemetry separate

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[1] Pacific Gas and Electric Company's Petition for Modification of D.09-08-027 (Public Version), April 28, 2010

from those provided through the AutoDR program. PG&E is planning on proposing such an incentive program in its DR Application.

**A Future SmartAC™ Program, Contingent on Getting Telemetry Issues Resolved with the CAISO**

PG&E's 2009 SmartAC A/S pilot demonstrated that the SmartAC infrastructure is capable of responding in the time required for non-spinning reserves. However, there several issues that need to be resolved before this resource can be bid into the CAISO A/S markets. These issues include:

(1) Current CAISO rules require 4-second telemetry for a resource providing A/S. However, it is currently very expensive to provide telemetry for every customer in a SmartAC resource. Possibilities to reduce this cost include statistical sampling or regressions, but these methodologies need to be developed, proven, and approved by the CAISO, the Western Electricity Coordinating Council (WECC), and the FERC.

(2) Current CAISO rules require the settlement based on aggregated meter data from all participants in a DR resource. To participate in the A/S markets, settlements are performed on a 5-minute basis. However, PG&E's SmartMeters™ for residential premises are typically 1-hour reads. Changes in the method of settlement or upgrades to the data retrieval are required to allow this resource to participate. Possibilities include using statistical regression models for baselines and actual usages. In addition, the CAISO and FERC will need to approve of any changes to baseline methodologies for settlements. This issue is currently being discussed in CAISO's Reliability Demand Response Product (RDRP) workshops with the participation of the Investor Owned Utilities (IOUs) and other stakeholders.

Given these uncertainties, it is unlikely that PG&E will be able to propose a well defined program incorporating SmartAC in its DR Application. However, PG&E will continue to evaluate future changes to the CAISO, WECC, and FERC rules and will attempt to propose an A/S program leveraging SmartAC infrastructure through an advice letter in 2012 or 2013. Additional pilots are anticipated as part of the DR Application to develop regression models and sample telemetry to enable the provision of A/S from AC Cycling at a low cost.

**<u>PG&E Plans to Continue Pilots for Advancing DR and A/S</u>**

For 2011, PG&E will be conducting a field pilot deployment of the Commercial and Industrial Intermittent Resource Management Pilot (CIIRM Pilot). This pilot was approved in D.09-08-027.[2] For the CIIRM Pilot, PG&E will examine utilizing the

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[2] D.09-08-027, Decision Adopting Demand Response Activities and Budgets for 2009 through 2011, p. 101.

DR potential of thermal energy storage technologies and bid-in the load reduction to the CAISO's A/S (spinning or non-spinning) markets using the PDR mechanism. This initiative will also test the feasibility of offering regulation ("up/down") from these DR resources. Because the market mechanisms for the provision of regulation services from DR is not in place at the CAISO, the regulation activities for this pilot are planned to be conducted outside the CAISO market. However, the lessons learned will help shape future CAISO mechanisms and retail offerings in the regulation area.

**PG&E Plans to Continue Policy and Planning Activities to Support A/S from DR**

PG&E plans to continue working with the CAISO, the Commission, the WECC, and the FERC to develop reasonable policies, rules, and regulations to allow DR and any other non-generation specific resource to participate in the CAISO A/S markets. PG&E worked closely with the CAISO to develop its non-resource specific tariff to allow non-generation resources to participate in the CAISO's spinning and non-spinning markets.

PG&E plans to continue working with the CAISO, utilizing the CIIRM pilot, to develop a reasonable methodology for allowing DR resources to participate in the regulation up and down markets.

**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 **September 6, 2010,** which is 21 days from 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: jnj@cpuc.ca.gov and mas@cpuc.ca.gov

Copies 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:

Jane K. Yura
Vice President, Regulation and Rates
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10B
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 1 advice filing, upon Energy Division approval, become effective **August 16, 2010**, the date of filing.

**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. Address changes to the General Order 96-B service list and all electronic approvals should be directed to email PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: **http://www.pge.com/tariffs.**

Jane Yura – OB

Vice President – Regulation and Rates

cc: Service Lists for A.08-06-001 and R.07-01-041

# 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: | Contact Person: Olivia Brown |
|---|---|
| ☒ ELC ☒ GAS | Phone #: 415.973.9312 |
| ☐ PLC ☐ HEAT ☐ WATER | E-mail: oxb4@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) #: 3719-E **Tier:** 1
Subject of AL: PG&E's Proposal for the Provision of Ancillary Services as Proxy Demand Response
Keywords (choose from CPUC listing): Compliance

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☒ One-Time ☐ Other ______________________

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.09-08-027

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

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: N/A

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Resolution Required? ☐ Yes ☒No

Requested effective date: August 16, 2010 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). N/A

Tariff schedules affected: N/A

Service affected and changes proposed: 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: Jane K. Yura, Vice President, Regulation and Rates**
**77 Beale Street, Mail Code B10B**
**P.O. Box 770000**
**San Francisco, CA 94177**
**E-mail: PGETariffs@pge.com**

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

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