July 2, 2014

Advice Letter 4093-E, 4093-E-A

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

Subject: PeakChoice Transition Plan in Compliance with D.12-04-045

Dear Mr. Cherry:

Advice Letter 4093-E and 4093-E-A are effective June 27, 2014.

Sincerely,

Edward F. Randolph, Director  
Energy Division
June 10, 2014

Advice 4093-E-A
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Supplemental: PeakChoice Transition Plan in Compliance with Decision 12-04-045

Purpose

On May 6, 2014, the California Public Utilities Commission’s (CPUC or Commission) Energy Division requested Pacific Gas and Electric Company (PG&E) to provide a supplement to Advice Letter 4093-E, which was originally submitted on July 30, 2012 but has not yet been approved. The content of the original advice letter is no longer current, so the Energy Division has requested that PG&E submit this supplement to provide an update on the PeakChoice Plan in Compliance with Ordering Paragraph 40 of Decision (D.) 12-04-045.

This advice letter supersedes Advice 4093-E in part.

Background

On April 30, 2012, the Commission issued D.12-04-045 on PG&E’s 2012-2014 Demand Response (DR) Application (A.) 11-03-001 and authorized funding for PG&E’s DR programs and pilots for 2012, 2013 and 2014. As part of this decision¹, the Commission ordered PG&E to transition PeakChoice™ customers to other DR programs and terminate the program by December 31, 2012, which has since been completed.

Ordering Paragraph 40 of D.12-04-045 directed PG&E to submit a Tier 2 Advice Letter, no later than 90 days after the issuance of the Decision, describing its PeakChoice™ transition plan. Specifically, the Commission directed that “the specifics and schedule of this transition plan include the details to adapt the IT system from PeakChoice™ to other DR programs and a revised plan to meet the 10 percent PDR requirements”.²

¹ Ordering Paragraph 39
² D.12-04-045, p.124
PG&E’s Updated Plan to Comply with Requirements for Proxy Demand Resource (PDR)

As discussed with the Energy Division on May 6, 2014, the plan presented in the original advice letter is no longer current given key policy issues being addressed in R.13-09-011 that will impact how PG&E meets its 10% PDR goal. Thus, PG&E’s plan to meet the 10% PDR goal that was provided in AL 4093-E is no longer in effect. There are several key issues currently being addressed in Phase 3 of Rulemaking (R.) 13-09-011 that could impact PG&E’s procurement of Supply Resource DR (e.g., DR goals, DR procurement mechanisms, DR programs as Load Modifying Resources or Supply Resources, etc.) so it would be prudent to wait for these issues to be resolved before making long-term commitments. However, PG&E remains committed to meeting the 10% PDR goal and has been taking steps to integrate some portions of its DR programs into the California Independent System Operator (CAISO) market. PG&E retained a consultant, Olivine, Inc. (Olivine) who conducted a study that specifically focused on the potential of PG&E’s existing DR programs to be bid into the CAISO market under the CAISO’s current processes and procedures. On the basis of the study, PG&E believes that it can bid approximately 10-20 MW of its DR as PDR into the CAISO’s Integrated Forward Market (day-ahead market) in 2014. The process for this conclusion is summarized in a presentation (Attachment A) given to the Energy Division on April 10, 2014. At that time PG&E committed to move forward with seeking to bid this amount of DR as PDR in 2014.

For 2015 and 2016, PG&E anticipates increasing the amount of DR being bid as PDR as experience is gained by PG&E, the CAISO and other market participants as noted on the last slide of Attachment A. The implementation of Electric Rule 24 and changes to CAISO processes and procedures will further impact the amount of PDR available for wholesale market bidding. Plans for 2017 and beyond are planned for being part of the November 2015 DR Budget Application\(^3\) for 2017 and beyond. This application is anticipated to incorporate major policy direction from Phase 3 in R.13-09-011.

Protests

Pursuant to General Order 96-B, Rule 7.5.1, PG&E request that the protest period be reopened but shortened to 10 days. Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than June 20, 2014, which is 10 days after the date of this filing. Protests must be submitted to:

\(^3\) As cited in D.14-010-004 on page 8 “[…] the deadline for the utilities to file applications for post-2016 demand response programs is rescheduled to November 30, 2015”
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:

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) 973-7226  
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**

PG&E submits this as a Tier 2 advice letter and request that it become effective upon approval. Additionally, PG&E request that Advice 4093-E and 4093-E-A are approved concurrently and with the same effective date.

**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 lists for A.11-03-001 and R.07-01-041. 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 filings can also be accessed electronically at: http://www.pge.com/tariffs

Vice President, Regulatory Relations

Attachment A - Presentation deck by Olivine identifying current and future potential of PDR by PG&E bid into the CAISO market, discussed with Energy Division and Commissioner Advisors Audrey Lee and Rachel Peterson, on April 10, 2014.

cc: Service Lists A.11-03-001 and R.07-01-041
Bruce Kaneshiro, Energy Division
Company name/CPUC Utility No. **Pacific Gas and Electric Company** (ID U39 E)

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<th>Contact Person: Shirley Wong</th>
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<td>GAS</td>
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<tr>
<td>☑ PLC</td>
<td>HEAT Water</td>
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</table>

**EXPLANATION OF UTILITY TYPE**

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

Advice Letter (AL) #: **4093-E-A**     Tier: **2**

Subject of AL: **Supplemental: PeakChoice Transition Plan in Compliance with Decision 12-04-045**

Keywords (choose from CPUC listing): Compliance, Demand Side Management

AL filing type: ☑ Monthly ☑ Quarterly ☑ Annual ☑ One-Time ☐ Other _____________________________

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: **Decision 12-04-045**

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:

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:  ___________________________________________

Resolution Required? ☐ Yes ☑ No

Requested effective date: **Upon Commission approval, concurrently with Advice 4093-E.**

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 proposed: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 10 days¹ after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

**CPUC, Energy Division**
ED Tariff Unit
505 Van Ness Ave., 4th Floor
San Francisco, CA 94102
E-mail: EDTariffUnit@cpuc.ca.gov

**Pacific Gas and Electric Company**
Attn: Brian K. Cherry, Vice President, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

¹ Pursuant to General Order 96-B, Rule 7.5.1, PG&E request that the protest period be reopened but shortened to 10 days.
ATTACHMENT A

Presentation deck by Olivine identifying current and future potential of PDR by PG&E bid into the CAISO market, discussed with Energy Division and Commissioner Advisors Audrey Lee and Rachel Peterson, on April 10, 2014
PG&E DR Integration

CPUC Energy Division Update
Beth Reid
breid@olivineinc.com
2014 Opportunities and Objectives

PDR 2014: Process Funnel

- Program Participation
- ISO Requirements
- Direct Access Impacts
- Operationally Manageable
- Integration Potential
2014 Opportunities and Objectives

PDR 2014: Program Participation

Program Participation
795 MW†

Less Non-Compatible Programs
≅ 355 MW†

≅ 440 MW

• Per Olivine’s 2013 Evaluation of PG&E’s DR Programs for Wholesale Market Integration, a number of programs are currently incompatible for wholesale market integration.

• Analysis assumes no exceptions to ISO requirements or new revisions to program tariffs

Funnel employs 2013 data. Results subject to revision due to unanticipated future fluctuations in enrollment & nominations
†Based on Ex Post Estimated Load Impacts from PG&E’s September 2013 ILP
PDR 2014: Program Participation

Program Participation
440 MW†

Less BIP Participation
\[ BIP \approx 210 \text{ MW}^† \]

\[ \approx 230 \text{ MW} \]

- CAISO RDRR implementation delays
- RDRR not economically dispatched by CAISO market
- Full RDRR dispatch may be required in an emergency

Funnel employs 2013 data. Results subject to revision due to unanticipated future fluctuations in enrollment & nominations

†Based on Load Impacts from 2013 Events
2014 Opportunities and Objectives

PDR 2014: ISO Requirements

Remaining Integration Potential
\[ \approx 230 \text{ MW} \]

ISO Requirements
\[ \approx 90 \text{ MW}^{†} \]

\[ \approx 140 \text{ MW} \]

- Sub-LAP versus System dispatch, no DLAP option in Wholesale Market
- Minimum load reduction 100 kW
- Maximum resource size 10 MW
- Each PDR must be associated with a single LSE (see next slide)

Funnel employs 2013 data. Results subject to revision due to unanticipated future fluctuations in enrollment & nominations

†From PG&Es April 1st DR Load Impact Filing 2013
2014 Opportunities and Objectives

PDR 2014: Direct Access Impact

Remaining Integration Potential
\[ \simeq 140 \text{ MW} \]

Less Direct Access Impact
\[ \simeq 100 \text{ MW}^{+} \]

\[ \simeq 40 \text{ MW} \]

- There are approximately 50 MW of Direct Access Participation in AMP & CBP
- Aggregator Portfolios Co-mingle Bundled and Direct Access
- Approximately 100 MW of Co-mingled participant load in Sub-LAPs with a significant direct access impact

Funnel employs 2013 data. Results subject to revision due to unanticipated future fluctuations in enrollment & nominations

\[^{+}\text{Based on Load Impacts from 2013 Events}\]
PDR 2014: Operationally Manageable

Remaining Integration Potential
\( \cong 40 \text{ MW} \)

Less Operationally Manageable
\( \cong 20 \text{ MW} \)

\( \cong 20 \text{ MW} \)

- Only 13 Sub-LAPs contain quantities feasible to register manually
- Registrations and bidding require new workflows with manual processes
- CAISO currently does not have DRS APIs in place
- Bidding all of AMP would require approximately 200 PDRs

Funnel employs 2013 data. Results subject to revision due to unanticipated future fluctuations in enrollment & nominations

†Based on Load Impacts from 2013 Events
PDR 2014: Process Funnel

Program Participation
$\approx 230$ MW

ISO Requirements
$\approx 140$ MW

Direct Access Impacts
$\approx 40$ MW

Operationally Manageable
$\approx 20$ MW

Integration Potential
$\approx 10$-$20$ MW

Funnel employs 2013 data. Results subject to revision due to unanticipated future fluctuations in enrollment & nominations

†Based on Load Impacts from 2013 Events
2014 Opportunities and Objectives

Project Timeline

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<th>Duration</th>
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CAISO Integration: 2015 and beyond

• PG&E believes further upside potential exists in the integration of DR with CAISO markets
  – Efficiency / greater comfort from 2014 experience
  – Access to Direct Access customers via agreements with third-party ESPs (≈ 100 MW)
  – Changes to CAISO business rules (≈ 90 MW; more if you include SmartAC)
  – Implementation of RDRR tariff (≈ 210 MW)

• Automation at PG&E and CAISO is needed to capture most of this potential
  – Automation required to manage significant increases in scale (e.g., resource registrations) and complexity (e.g., real-time dispatch)
  – PG&E intends to pursue additional integration opportunities that do not require automation, likely limited to tens of MW

• Automation will require significant investment of time and money
  – Currently estimated to be tens of millions of dollars
  – DR OIR Phase 3 and next DR funding application (November 2015) should guide investment decision
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