September 19, 2014

Advice 4498-E
(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

Subject: Information-Only Filing Regarding Net Energy Metering Costs

Pacific Gas and Electric Company (PG&E) hereby submits for filing a report on interconnection costs for all NEM customers.

Purpose

The purpose of this filing is to report PG&E’s costs of interconnection for all NEM customers, for the period of November 1, 2013 through August 31, 2014.

Background

In accordance with Resolution E-4610 and Decision (D.) 14-05-033, PG&E shall report costs of interconnection for all NEM customers, first on September 19, 2014, with a follow up report no later than June 30, 2015.

In accordance with D.14-05-033, the investor-owned utilities jointly filed a Tier 2 Advice Letter detailing the cost categories being tracked pursuant to E-4610 on June 23, 2014. Southern California Edison (SCE) filed Advice Letter 4446-E on behalf of PG&E, and was approved as of June 23, 2014 via disposition letter on August 1, 2014.

Net Energy Metering Interconnection Costs

The report of interconnection costs for all NEM customers is attached to this Advice Letter, Attachment A.

Protests

This is an information-only advice letter filing. Pursuant to General Order 96-B Section 6.2, PG&E is not seeking relief through this advice letter and is not subject to protest. Instead, PG&E is simply reporting the interconnection costs for all NEM customers pursuant to Resolution E-4610 and D.14-05-033.
Effective Date

PG&E requests that this information-only advice filing become effective September 19, 2014, 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 and the parties on the service list for R.12-11-005. Address changes to the General Order 96-B service list should be directed to e-mail 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.

Meredith Allen /KHC

Senior Director – Regulatory Relations

cc: Service List R.12-11-005
**Company name/CPUC Utility No.** Pacific Gas and Electric Company (ID U39 E)  

<table>
<thead>
<tr>
<th>Utility type:</th>
<th>Contact Person: Kingsley Cheng</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ ELC</td>
<td>Phone #: (415) 973-5265</td>
</tr>
<tr>
<td>□ GAS</td>
<td>E-mail: <a href="mailto:k2c0@pge.com">k2c0@pge.com</a> and <a href="mailto:PGETariffs@pge.com">PGETariffs@pge.com</a></td>
</tr>
<tr>
<td>□ PLC</td>
<td></td>
</tr>
<tr>
<td>□ HEAT</td>
<td></td>
</tr>
<tr>
<td>□ WATER</td>
<td></td>
</tr>
</tbody>
</table>

**EXPLANATION OF UTILITY TYPE**  
ELC = Electric  
GAS = Gas  
PLC = Pipeline  
HEAT = Heat  
WATER = Water

Advice Letter (AL) #: **4498-E**  
Subject of AL: Information-Only Filing Regarding Net Energy Metering Costs  
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 #: Resolution E-4610

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: **September 19, 2014**  
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

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

This is an information-only advice letter filing. Pursuant to General Order 96-B Section 6.2, PG&E is not seeking relief through this advice letter and is not subject to protest.
### Total NEM Applications

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total NEM Applications</td>
<td>35,652</td>
</tr>
<tr>
<td>Total NEM Interconnections</td>
<td>33,774</td>
</tr>
</tbody>
</table>

### Table 1: Processing/Administration Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>$25,600</td>
</tr>
<tr>
<td>Supplemental Review Fee</td>
<td>$0</td>
</tr>
<tr>
<td>Distribution Upgrades</td>
<td>$27,377</td>
</tr>
</tbody>
</table>

**Notes:**
- Includes Application Processing (e.g., validating and approving single line diagram, interconnection agreement, electrical inspection clearance from governmental agency having jurisdiction, and other required documents), and back office tasks (e.g., initial billing setup).
- Billing setup costs available for NEMS only. Billing setup for NEMEXP, NEMA, NEMMT, NEMFC, NEMV, and NEMVMASH will be included in June 30, 2015 report.

### Table 2: Distribution Engineering Costs (1)

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brokerage Crunch</td>
<td>$1,024,181</td>
</tr>
</tbody>
</table>

**Notes:** Includes technical analysis, studies, and screens consistent with Rule 21 (e.g., voltage rise, 15% Penetration, transformer loading).

### Table 3: Metering Installation/Inspection and Commissioning

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution Engineering Costs</td>
<td>$268,053</td>
</tr>
</tbody>
</table>

**Notes:** Includes residential and non-residential meter changes and remote meter programming, material, supplies, procurement costs, labor for installation, testing, engineering, and quality assurance necessary for interconnection.

### Table 4: Facility Upgrade Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interconnection Facilities</td>
<td>$1,010,725</td>
</tr>
<tr>
<td>Distribution Upgrades</td>
<td>$1,184,001</td>
</tr>
<tr>
<td>Total</td>
<td>$2,194,726</td>
</tr>
</tbody>
</table>

**Notes:** Includes technical analysis, studies, and screens consistent with Rule 21 (e.g., voltage rise, 15% Penetration, transformer loading).

### Table 5: NEM-Paired Storage Waived Fees and Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Projects</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee</td>
<td>32</td>
<td>$25,600</td>
</tr>
<tr>
<td>Supplemental Review Fee</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Distribution Upgrades</td>
<td>1</td>
<td>$27,377</td>
</tr>
<tr>
<td>Standby Charges</td>
<td>17</td>
<td>$1,298</td>
</tr>
<tr>
<td>NGOM Metering</td>
<td>3</td>
<td>$1,800</td>
</tr>
</tbody>
</table>

**Note:** Standby Charges calculated according to Schedule S for customers interconnected at distribution level. PG&E understands there can be reactive demand impacts from inverter based customer-storage units without reactive power compensation; however since most of these customers do not have a meter capable of measuring VARs, the reactive demand charges will be tracked as $0.00.

### Table 6: Refunded NEM-Paired Storage Interconnection Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Projects</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refunded IC fees and Metering</td>
<td>65</td>
<td>$51,300</td>
</tr>
</tbody>
</table>

**Notes:** Includes 65 application fees and 1 Supplemental Review fee.

In response to the CPUC order stated in Decision (D) 14-05-033, PG&E has tracked the following waived fees and costs (Table 6) related to interconnection of NEM-Paired Storage for the period of May 23, 2014 through August 31, 2014.
AT&T
Alcantar & Kahl LLP
Anderson & Poole
BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Braun Blasing McLaughlin, P.C.
CENERGY POWER
California Cotton Ginners & Growers Assn
California Energy Commission
California Public Utilities Commission
California State Association of Counties
Calpine
Casner, Steve
Center for Biological Diversity
City of Palo Alto
City of San Jose
Clean Power
Coast Economic Consulting
Commercial Energy
Cool Earth Solar, Inc.
County of Tehama - Department of Public Works
Crossborder Energy
Davis Wright Tremaine LLP
Day Carter Murphy
Defense Energy Support Center
Dept of General Services
Division of Ratepayer Advocates
Douglass & Liddell
Downey & Brand
Ellison Schneider & Harris LLP
G. A. Krause & Assoc.
GenOn Energy Inc.
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
In House Energy
International Power Technology
Intestate Gas Services, Inc.
K&L Gates LLP
Kelly Group
Linde
Los Angeles County Integrated Waste Management Task Force
Los Angeles Dept of Water & Power
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenna Long & Aldridge LLP
McKenzie & Associates
Modesto Irrigation District
Morgan Stanley
NLine Energy, Inc.
NRG Solar
Nexant, Inc.
North America Power Partners
Occidental Energy Marketing, Inc.
OnGrid Solar
Pacific Gas and Electric Company
Praxair
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
SCE
SDG&E and SoCalGas
SPURR
San Francisco Public Utilities Commission
Seattle City Light
Sempra Utilities
SoCalGas
Southern California Edison Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
Tiger Natural Gas, Inc.
TransCanada
Utility Cost Management
Utility Power Solutions
Utility Specialists
Verizon
Water and Energy Consulting
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)