August 1, 2014

Brian Cherry
Vice President, Regulation and Rates
Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177

SUBJECT: JOINT AL FILING OF SCE, PG&E, & SDG&E REGARDING NET ENERGY METERING INTERCONNECTION COST CATEGORIES BEING TRACKED PURSUANT TO RES. E-4610 & D.14-05-033

Dear Mr. Cherry:

Advice Letter 4446-E is effective as of July 23, 2014.

Sincerely,

Edward Randolph
Director, Energy Division
June 23, 2014

ADVICE 3062-E
(Southern California Edison Company U 338-E)

ADVICE 4446-E
(Pacific Gas and Electric Company U 39-E)

ADVICE 2615-E
(San Diego Gas & Electric Company U 902-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION


PURPOSE

Southern California Edison Company (SCE), on behalf of itself, Pacific Gas and Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E), hereby submits this joint advice letter, in compliance with Ordering Paragraph (OP) 15 of Decision (D.) 14-05-033, detailing the net energy metering (NEM) interconnection cost categories being tracked pursuant to Resolution E-4610,2

BACKGROUND

On September 20, 2013, the California Public Utilities Commission (Commission) issued Resolution E-4610, in which the Commission concluded that allowing eligible NEM customer-generators to aggregate their load from multiple meters would not result in an

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2 Resolution E-4610, Commission determination authorizing investor owned utilities to implement net energy metering aggregation pursuant to Senate Bill 594 (Wolk, 2012).
increase in the expected revenue obligations of customer who are not eligible customer-generators. The Commission based its conclusion on the NEM Cost Effectiveness Evaluation completed in 2010. To balance the interest of both participating and non-participating ratepayers, the Commission stated that more data inputs were needed to inform any future necessary policy changes related to the interconnection cost exemptions granted to NEM customers. As such, the Commission ordered the investor owned utilities (IOUs) to immediately begin tracking the interconnection cost data based on the actual interconnection costs for all NEM customers and report the information by September 19, 2014.

On May 23, 2014, the Commission issued D.14-05-033 and allowed qualifying energy storage devices paired with NEM-eligible generation facilities (NEM-paired storage systems) to be exempt from interconnection application fees, supplemental review fees, distribution upgrade fees, and standby charges. Due to the limited data available on the costs and impacts of interconnecting energy storage or NEM-paired storage systems to the grid, the Commission ordered the IOUs to:

1. Record data on the interconnection application fee waivers, supplemental review waivers, distribution cost upgrade waivers, and standby charge waivers resulting from interconnecting NEM-paired storage systems beginning with the currently pending storage interconnection requests;
2. Augment the reporting requirement directed by Resolution E-4610 with the fee waivers mentioned above;
3. File a Tier 2 Advice Letter detailing the cost categories being tracked pursuant to Resolution E-4610; and
4. Submit the report to the Commission and serve the report on the service list of R.12-11-005 or its successor proceeding by September 19, 2014, and update the report by June 30, 2015.

Thus, SCE, on behalf of itself, PG&E and SDG&E, provides a list of the cost categories currently being tracked related to the interconnection of eligible NEM generating facilities

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3 The Commission hired Energy and Environmental Economics, Inc. (E3) to perform an analysis of the costs and benefits of NEM in compliance with Public Utilities Code Section 2827, which requires the CPUC to “…submit a report to the Governor and the Legislature on the costs and benefits of net energy metering…” The analysis follows the cost-benefit methodology for the evaluation of distributed generation adopted by the Commission in D.09-08-026. E3’s analysis was based on the available photovoltaic installations participating in the NEM tariffs through 2008.
4 The IOUs include SCE, PG&E and SDG&E.
5 Because the Commission did not specify the interconnection cost tracking start date, the IOUs determined, after consulting with the Commission’s Energy Division, that November 2013 was a reasonable time period to commence with tracking the actual interconnection costs related to NEM.
6 D.14-05-033, OP 14 at p. 41.
7 Id. OP 16 at p. 42.
8 Id. OP 15 at p. 41.
9 Id. OP 16 at p. 42.
under each IOU’s NEM tariffs\textsuperscript{10} and the waived fees associated with interconnecting NEM-paired storage systems.

**NEM INTERCONNECTION COSTS BEING TRACKED AND REPORTED PURSUANT TO RESOLUTION E-4610**

The NEM “interconnection costs” being tracked represent various costs incurred under the NEM tariffs.\textsuperscript{11} The NEM cost categories outlined below are consistent, in part, with the NEM cost categories provided by each IOU for the NEM Ratepayer Impact Evaluation published on October 28, 2013.\textsuperscript{12} Moreover, on January 15, 2014, the IOUs sought guidance from the Commission’s Energy Division and agreed to track these NEM cost categories dating back to November 2013.

1. **Processing/Administration Costs**
   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)

2. **Distribution Engineering Costs**
   Includes technical analysis, studies, and screens consistent with Rule 21 (e.g., voltage rise, 15 percent penetration, transformer loading)

3. **Metering Installation/Inspection and Commissioning**
   Includes residential and non-residential meter changes, remote meter programming, material, supplies, procurement costs, labor for installation, testing, engineering, and quality assurance necessary for interconnection

4. **Facility Upgrade Costs**
   Includes interconnection facilities and distribution upgrades

**INTERCONNECTION FEES BEING WAIVED AND REPORTED PURSUANT TO D.14-05-033**

As ordered by the Commission in D.14-05-033, the IOUs will waive the fees (i.e., interconnection application fees, supplemental review fees, distribution upgrade fees and standby charges) associated with interconnecting qualifying NEM-paired storage

\textsuperscript{10} SCE’s currently available NEM tariffs include: Schedules NEM, MASH-VNM, NEM-V, and FC-NEM. PG&E’s current available NEM tariffs include: Schedules NEM (including NEMA and NEMMT), NEMFC, NEMV and NEMVMASH. SDG&E’s currently available NEM tariffs include: Schedules NEM, NEM-FC, NEM-V, and VNM-A.

\textsuperscript{11} The overall costs of NEM are not limited to the interconnection costs that the Commission ordered the IOUs to track and report. The overall costs of NEM also include ongoing billing services, customer contact center costs in responding to customer inquiries on NEM bills, and other administration costs necessary in offering NEM.

\textsuperscript{12} The Commission contracted with E3 to provide an evaluation of the costs and benefits of the NEM program. The study fulfills the requirements of Assembly Bill 2514 (Bradford, 2012) and D.12-05-036, to evaluate “who benefits, and who bears the economic burden, if any, of the net energy metering program.”
systems. The IOU began tracking the waived fees subsequent to the issuance of the decision on May 23, 2014.

REPORTING OF INTERCONNECTION COSTS TO BE REFUNDED TO CUSTOMERS PURSUANT TO D.14-05-033

In addition to reporting the NEM interconnection costs and waived fees discussed above, the IOUs propose to track and report the interconnection costs refunded to customers who paid to interconnect qualifying NEM-paired storage systems prior to the issuance of D.14-05-033. The inclusion of the refunded interconnection costs in the reporting requirement will provide the Commission with more information to evaluate the impact of interconnecting NEM-paired storage systems. The IOUs intend to use January 1, 2012, which was the effective date of Senate Bill 489 (Wolk, 2011), as the cut-off date for the refund eligibility.

TIER DESIGNATION

Pursuant to General Order (GO) 96-B, Energy Industry Rule 5.2 and D.14-05-033, this advice letter is submitted with a Tier 2 designation.

EFFECTIVE DATE

This advice filing will become effective on July 23, 2014, which is 30 calendar days after the date of its filing.

NOTICE

Anyone wishing to protest this advice filing may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received by the Energy Division and SCE no later than 20 days after the date of this advice filing. Protests should be mailed to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, California 94102
E-mail: Edtariffunit@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address as above).

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13 See D.14-05-033, Ordering Paragraph 2 at p. 39.
14 Senate Bill (SB) 489 signed by the Governor on October 8, 2011 in part amended Public Utilities Code Section 2827 to expand the number of technologies eligible for service under the NEM tariff to include the renewable sources listed in paragraph (1) of subdivision (a) of Section 25741 of the Public Resources (PR) Code. Those renewable sources are further defined in the California Energy Commission’s Renewable Portfolio Standard Guidebook.
In addition, protests and all other correspondence regarding this advice letter should be sent by letter and transmitted via facsimile or electronically to the attention of:

**For SCE:**
Megan Scott-Kakures  
Vice President, Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: AdviceTariffManager@sce.com

Leslie E. Starck  
Senior Vice President, Regulatory Policy & Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: Karyn.Gansecki@sce.com

**For PG&E:**
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

**For SDG&E:**
Megan Caulson  
Regulatory Tariff Manager  
8330 Century Park Court, CP32C  
San Diego, California 92123-1548  
Facsimile: (858) 654-1879  
E-mail: MCaulson@semprautilities.com

No restrictions limit who may file a protest, but the protest must set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with Section 4 of GO 96-B, SCE is serving copies of this advice filing to the interested parties shown on the attached GO 96-B and R.12-11-005 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or at (626) 302-2930. For changes to all other
service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing at SCE's corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE's web site at https://www.sce.com/wps/portal/home/regulatory/advice-letters.

For questions, contact Shiela Linao at (626) 302-4506 or shiela.linao@sce.com.

Southern California Edison Company

/s/ MEGAN SCOTT-KAKURES
Megan Scott-Kakures

MSK:sl:sq
Enclosures
**CALIFORNIA PUBLIC UTILITIES COMMISSION**

**ADVICE LETTER FILING SUMMARY**
**ENERGY UTILITY**

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

<table>
<thead>
<tr>
<th>Company name/CPUC Utility No.:</th>
<th>Southern California Edison Company (U 338-E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility type:</td>
<td>Contact Person: Darrah Morgan</td>
</tr>
<tr>
<td>☑ ELC</td>
<td>Phone #: (626) 302-2086</td>
</tr>
<tr>
<td>☐ GAS</td>
<td>E-mail: <a href="mailto:Darrah.Morgan@sce.com">Darrah.Morgan@sce.com</a></td>
</tr>
<tr>
<td>☐ PLC</td>
<td>E-mail Disposition Notice to: <a href="mailto:AdviceTariffManager@sce.com">AdviceTariffManager@sce.com</a></td>
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<tr>
<td>☐ HEAT</td>
<td>Date Filed/ Received Stamp by CPUC</td>
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<tr>
<td>☐ WATER</td>
<td>Advice Letter (AL) #: 3062-E et al.</td>
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<tr>
<td></td>
<td>Tier Designation: 2</td>
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<td></td>
<td>Keywords (choose from CPUC listing): Compliance, Self Generation, Metering</td>
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<tr>
<td></td>
<td>AL filing type: ☑ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other</td>
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<td>If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.14-05-033</td>
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<tr>
<td></td>
<td>Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:</td>
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<td>Summarize differences between the AL and the prior withdrawn or rejected AL:</td>
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<td>Confidential treatment requested? ☐ Yes ☑ No</td>
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<td>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:</td>
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<tr>
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<td>Resolution Required? ☐ Yes ☑ No</td>
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<tr>
<td></td>
<td>Requested effective date: 7/23/14 No. of tariff sheets: -0-</td>
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<td>Estimated system annual revenue effect: (%):</td>
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<td>Estimated system average rate effect (%):</td>
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<td>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).</td>
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<td>Tariff schedules affected: None</td>
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<td>Service affected and changes proposed¹:</td>
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<tr>
<td></td>
<td>Pending advice letters that revise the same tariff sheets:</td>
</tr>
</tbody>
</table>

¹ Discuss 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 filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, California 94102  
E-mail: EDTariffUnit@cpuc.ca.gov

Megan Scott-Kakures  
Vice President, Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Facsimile: (626) 302-4829  
E-mail: AdviceTariffManager@sce.com

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Senior Vice President, Regulatory Policy & Affairs  
c/o Karyn Gansecki  
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Facsimile: (858) 654-1879  
E-mail: MCAulson@semprautilities.com
PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV

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Bartle Wells Associates
Braun Blasing McLaughlin, P.C.

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California Energy Commission
California Public Utilities Commission
California State Association of Counties
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Casner, Steve
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City of San Jose
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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

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Downey & Brand
Ellison Schneider & Harris LLP
G. A. Krause & Assoc.
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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
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Occidental Energy Marketing, Inc.
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Regulatory & Cogeneration Service, Inc.
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SCE
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Tiger Natural Gas, Inc.
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Utility Power Solutions
Utility Specialists
Verizon
Water and Energy Consulting
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)