

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



October 10, 2019

**Advice Letter 5640-E**

Erik Jacobson  
Director, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

**SUBJECT: Information-Only Submittal Regarding Net Energy Metering (NEM)  
Costs**

Dear Mr. Jacobson:

Advice Letter 5640-E is effective as of September 19, 2019.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph  
Deputy Executive Director for Energy and Climate Policy/  
Director, Energy Division

September 19, 2019

**Advice 5640-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Information-Only Submittal Regarding Net Energy Metering (NEM) Costs**

**Purpose**

Pacific Gas and Electric Company (PG&E) hereby submits via an Information-only submittal with a report on interconnection costs for all Net Energy Metering (NEM) customers in compliance with Decision (D.) 16-01-044.<sup>1</sup> This submittal covers the period of August 1, 2018 through July 31, 2019.

**Background**

D.16-01-044 authorized the investor-owned utilities (IOUs) to collect a one-time application fee for NEM successor tariff customers with systems smaller than 1 megawatt (MW), to allow the utility to recover the costs of providing the interconnection service from the customers benefitting from the interconnections<sup>2</sup>. The fee for each IOU must be based on the interconnection costs shown in each IOU's June 2015 advice letter<sup>3</sup>, filed in accordance with D.14-05-033 and Resolution E-4610.

D.16-01-044 required each IOU to continue to report its interconnection costs in accordance with the directions in D.14-05-033 and Resolution E-4610. After discussion with Energy Division, it was determined that the IOUs shall submit this report yearly on

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<sup>1</sup> D.16-01-044, p. 88, provides in pertinent part: "Because costs may change over time, each IOU must continue to report its interconnection costs in accordance with the directions in D.14-05-033 and Res. E-4610."

<sup>2</sup> D.16-01-044 at pp.87-88. Note that Single-family Affordable Solar Housing (SASH) customers are exempted from this interconnection fee.

<sup>3</sup> PG&E filed Advice 4660-E on June 30, 2015 (approved December 31, 2015). PG&E filed a subsequent advice letter, Advice 4847-E, on May 25, 2016 (approved January 9, 2017) to correct costs that were inadvertently omitted.

September 19<sup>4</sup>. This report contains data from August 1, 2018 through July 31, 2019. Next year's report will contain data from August 1, 2019 through July 31, 2020.

### **Net Energy Metering Interconnection Costs**

The report of interconnection costs for all NEM customers from August 1, 2018 through July 31, 2019 is attached to this Advice Letter, Attachment A.

Additional various costs and fees associated with the interconnection process incurred by PG&E are not reflected under this report or recovered through the current NEM interconnection fee. These costs relate to Electronic Signature requests, Online payments, Online portal submittals, other IT related expenditures and enhancements, etc.

The submittal would not increase any current rate or charge, cause the withdrawal of service, or conflict with any rate schedule or rule.

### **Protests**

This is an information-only advice letter submittal. 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 D.16-01-044.

### **Effective Date**

PG&E requests that this information-only advice letter become effective upon date of submittal, which is September 19, 2019.

### **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 R.12-11-005 and R.14-07-002. 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/>.

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/S/

Erik Jacobson  
Director, Regulatory Relations

Attachments

cc: Service Lists R.12-11-005 and R.14-07-002

<sup>4</sup> Or the next business day, should September 19 fall on a weekend or holiday (Rule 1.15 Computation of Time California Public Utilities Commission Rules of Practice and Procedure)



# ADVICE LETTER SUMMARY

## ENERGY UTILITY



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

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39E)

Utility type:

- ELC       GAS       WATER  
 PLC       HEAT

Contact Person: Yvonne Yang

Phone #: (415)973-2094

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: Yvonne.Yang@pge.com

EXPLANATION OF UTILITY TYPE

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

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5640-E

Tier Designation: Information-Only

Subject of AL: Information-Only Submittal Regarding Net Energy Metering (NEM) Costs

Keywords (choose from CPUC listing): Compliance

AL Type:  Monthly  Quarterly  Annual  One-Time  Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D. 16-01-044

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:

Confidential treatment requested?  Yes  No

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:

Resolution required?  Yes  No

Requested effective date: 9/19/19

No. of tariff sheets: 0

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:

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

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

<sup>1</sup>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 submittal, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102  
Email: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Name: Erik Jacobson, c/o Megan Lawson  
Title: Director, Regulatory Relations  
Utility Name: Pacific Gas and Electric Company  
Address: 77 Beale Street, Mail Code B13U  
City: San Francisco, CA 94177  
State: California Zip: 94177  
Telephone (xxx) xxx-xxxx: (415)973-2093  
Facsimile (xxx) xxx-xxxx: (415)973-3582  
Email: PGETariffs@pge.com

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: District of Columbia Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

Advice 5640-E  
September 19, 2019

## **Attachment A**

### **NEM Interconnection Costs**

**Attachment A**  
**NEM Interconnection Costs**

In response to the California Public Utilities Commission (CPUC) order stated in Decision (D) 16-01-044, PG&E has tracked the following interconnection costs (Tables 1-5) related to its Net Energy Metering tariffs for the period August 1, 2018 through July 31, 2019. PG&E's current available NEM tariffs include: Schedules NEM (including NEMA and NEMMT), NEMFC, NEMV, and NEMVMASH.

**Note:**

- The figures included in this report are based on historic interconnection records. They represent the cost of interconnection between the dates of August 1, 2018 through July 31, 2019 as a result of existing interconnection processes and requirements. As such, any attempts to use these figures to forecast future interconnection costs should account for changes to processes, requirements/ standards, and changes in capacity of interconnected distributed energy resources relative to the local integration capacity of the circuit.
- However, please note that additional various costs and fees associated with the interconnection process incurred by PG&E are not reflected on this report or recovered through the current NEM interconnection fee. These costs relate to electronic signature requests, online payments, online portal submittals, and other IT related expenditures and enhancements.

<b>Total NEM Applications</b>	66,723
<b>Total NEM Interconnections</b>	63,899

<b>Table 1</b> <b>Processing/Administration Costs</b>	
<b>Total</b>	\$7,011,444
Note: Includes Application Processing (e.g., validating 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).	

<b>Table 2</b> <b>Distribution Engineering Costs</b>	
<b>Total</b>	\$1,738,264
Note: Includes technical analysis, studies, and screens consistent with Rule 21 (e.g., voltage rise, 15% Penetration, transformer loading)	

<b>Table 3</b> <b>Metering Installation/Inspection and Commissioning</b>	
<b>Total</b>	\$105,980
Note: 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	

<b>Table 4</b> <b>Facility Upgrade Costs</b>	
<b>Type</b>	<b>Total</b>
Interconnection Facilities	\$5,385,714
Distribution Upgrades	\$14,485,595
<b>Total</b>	<b>\$19,871,309</b>

In response to the CPUC order stated in Decision (D) 16-01-044, PG&E has tracked the following waived fees and costs (Table 5) related to interconnection of NEM-Paired Storage for the period of August 1, 2018 through July 31, 2019.

<b>Table 5</b> <b>NEM-Paired Storage Waived Fees and Costs</b>		
<b>Category</b>	<b>Number of Projects</b>	<b>Total Cost</b>
Application Fee	334	\$48,430
Supplemental Review Fee	5	\$12,500
Distribution Upgrades	6	\$143,927
Standby Charges	3,171	\$833,650
NGOM Metering	1,589	\$1,380,333
Notes:		
• Standby Charges calculated according to Schedule S for customers interconnected at distribution level. PG&E understands that 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.		

In addition to reporting NEM interconnection costs and waived fees, PG&E proposed in Advice Letter 4446-E to track and report the interconnection costs refunded to customers who paid to interconnect qualifying NEM-Paired Storage systems prior to the issuance of Decision (D) 14-05-033.

<b>Table 6</b> <b>Refunded NEM-Paired Storage Interconnection Costs</b>		
<b>Category</b>	<b>Number of Projects</b>	<b>Total Cost</b>
Refunded IC fees and Metering costs	0	\$0
Notes:		
• All relevant Interconnection costs for NEM-Paired Storage Projects are waived as per the the issuance of Decision (D) 14-05-033		

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

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Praxair
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	
	Energy Management Service	
Alta Power Group, LLC	Engineers and Scientists of California	Redwood Coast Energy Authority
Anderson & Poole	Evaluation + Strategy for Social Innovation	Regulatory & Cogeneration Service, Inc.
	GenOn Energy, Inc.	SCD Energy Solutions
Atlas ReFuel	Goodin, MacBride, Squeri, Schlotz & Ritchie	
BART	Green Charge Networks	SCE
	Green Power Institute	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Hanna & Morton	
P.C. CalCom Solar	ICF	SPURR
California Cotton Ginners & Growers Assn	International Power Technology	San Francisco Water Power and Sewer
California Energy Commission	Intestate Gas Services, Inc.	Seattle City Light
California Public Utilities Commission	Kelly Group	Sempra Utilities
California State Association of Counties	Ken Bohn Consulting	Southern California Edison Company
Calpine	Keyes & Fox LLP	Southern California Gas Company
	Leviton Manufacturing Co., Inc. Linde	Spark Energy
Cameron-Daniel, P.C.	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
Casner, Steve	Los Angeles Dept of Water & Power	Sunshine Design
Cenergy Power	MRW & Associates	Tecogen, Inc.
Center for Biological Diversity	Manatt Phelps Phillips	TerraVerde Renewable Partners
City of Palo Alto	Marin Energy Authority	Tiger Natural Gas, Inc.
	McKenzie & Associates	
City of San Jose	Modesto Irrigation District	TransCanada
Clean Power Research	Morgan Stanley	Troutman Sanders LLP
Coast Economic Consulting	NLine Energy, Inc.	Utility Cost Management
Commercial Energy	NRG Solar	Utility Power Solutions
County of Tehama - Department of Public Works		Utility Specialists
Crossborder Energy	Office of Ratepayer Advocates	
Crown Road Energy, LLC	OnGrid Solar	Verizon
Davis Wright Tremaine LLP	Pacific Gas and Electric Company	Water and Energy Consulting Wellhead Electric Company
Day Carter Murphy	Peninsula Clean Energy	Western Manufactured Housing Communities Association (WMA)
		Yep Energy
Dept of General Services		
Don Pickett & Associates, Inc.		
Douglass & Liddell		