# PUBLIC UTILITIES COMMISSION

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SAN FRANCISCO, CA 94102-3298

**F I L E D**
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April 11, 2012                                    Agenda ID #11256
                                                   Quasi-Legislative


TO PARTIES OF RECORD RULEMAKING 10-05-004.

This is the proposed decision of Commissioner Michael R. Peevey.  It will not appear on the Commission's agenda sooner than 30 days from the date it is mailed.  The Commission may act then, or it may postpone action until later.

When the Commission acts on the proposed decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision.  Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the proposed decision as provided in Article 14 of the Commission's Rules of Practice and Procedure (Rules), accessible on the Commission's website at www.cpuc.ca.gov.  Pursuant to Rule 14.3, opening comments shall not exceed 15 pages.

Comments must be filed pursuant to Rule 1.13 either electronically or in hard copy.  Comments should be served on parties to this proceeding in accordance with Rules 1.9 and 1.10.  Electronic and hard copies of comments should be sent to ALJ Dorothy Duda at dot@cpuc.ca.gov and Commissioner Peevey's advisor, Scott Murtishaw, at sgm@cpuc.ca.gov.  The current service list for this proceeding is available on the Commission's website at www.cpuc.ca.gov.


/s/  KAREN V. CLOPTON
Karen V. Clopton, Chief
Administrative Law Judge

KVC:lil


Attachment

**DRAFT**

Decision **PROPOSED DECISION OF COMMISSIONER PEEVEY**
(Mailed 4/11/2012)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

| Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues. | Rulemaking 10-05-004 (Filed May 6, 2010) |
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## DECISION REGARDING CALCULATION OF THE NET ENERGY METERING CAP

## 1. Summary

The "Net Energy Metering cap," as established in Public Utilities Code Section 2827(c)(1), limits the availability of electric utility Net Energy Metering programs to eligible customer-generators in the utility service territory on a first-come-first-served basis until the total rated generating capacity used by eligible customer-generators exceeds five percent of the utility's "aggregate customer peak demand." This decision clarifies the denominator of the equation, defined in the statute as "aggregate customer peak demand," that Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company should use to calculate the five percent net energy metering cap.

By this decision, the Commission clarifies that "aggregate customer peak demand" means the aggregation, or sum, of individual customers' peak demands, i.e., their non-coincident peak demands.

## 2.    Background

The Net Energy Metering (NEM) program was established by Senate Bill (SB) 656 in 1995 (Stats. 1995, ch. 369).  At that time, the NEM program cap was defined by statute as "0.1 percent of the utility's peak electricity demand forecast for 1996" and the statute included the exact figures for the 1996 system peak forecast for each utility.  The statute has been modified on numerous occasions since 1995.  Currently, the language regarding a cap on participation in the NEM program is contained in Pub. Util. Code § 2827(c)(1), which provides that:

> Every electric utility shall develop a standard contract or tariff providing for net energy metering, and shall make this standard contract or tariff available to eligible customer-generators, upon request, on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds 5 percent of the electric utility's aggregate customer peak demand.

In essence, a utility's progress toward reaching the NEM cap can be expressed by the following equation:

$$\frac{\text{Total Rated Generating Capacity of Eligible Customer Generators}}{\text{Aggregate Customer Peak Demand}} = 100\% \text{ of NEM cap}$$

In July 2011, the Interstate Renewable Energy Council (IREC) filed a motion requesting clarification that the scope of this rulemaking include the issue of how to calculate the NEM cap.  IREC maintains that the three investor-owned utilities (IOUs) use different methods of calculating the NEM cap due to a lack of clarity in the definition of the term "aggregate customer peak demand," which appears in § 2827(c)(1).

A ruling dated December 14, 2011 granted IREC's motion and allowed parties to file suggested methodologies for calculation of the NEM cap.  The ruling noted the variation in the methods currently used by Pacific Gas and

Electric Company (PG&E), Southern California Edison Company (SCE) and

San Diego Gas and Electric Company (SDG&E) to calculate aggregate customer

peak demand, which is the denominator of the NEM cap equation.  As described

in the ruling, each utility currently uses a different demand interval – either 5, 30

or 60 minutes – to calculate aggregate customer peak demand.

Comments containing NEM cap calculation proposals were filed on

January 17, 2012 by Distributed Energy Consumer Advocates (DECA),[1] PG&E,

SCE, and jointly by IREC, the Vote Solar Initiative, the California Solar Energy

Industries Association, the Solar Energy Industries Association, and the Sierra

Club (collectively, the Joint NEM Parties).  Reply comments on these proposals

were filed on January 27, 2012 by DECA, the Commission's Division of

Ratepayer Advocates (DRA), PG&E, SCE, SDG&E, and the Joint NEM Parties.

## 3.    NEM Cap Calculation Proposals

### 3.1.    Utility proposals

PG&E describes how it currently calculates the NEM cap and suggests the

Commission adopt PG&E's methodology as the single statewide method to

calculate the NEM cap because it is both practical to administer and consistent

with the statute.  PG&E notes that its current NEM tariff specifies the details of

how PG&E calculates its NEM cap.  As set forth in the tariff, the numerator of the

equation is the capacity of the NEM-eligible generation, based on California

Energy Commission (CEC) "AC ratings."  According to PG&E, capacity based on

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[1] On March 23, 2012, DECA filed a motion to withdraw its comments and its Notice of
Intent to Claim Compensation in this proceeding, stating it was no longer able to
participate in this phase of the proceeding.  DECA's motion is granted and its
comments on the NEM cap methodology will not be considered at this time, although
the comments will remain in the formal file of this proceeding.

these CEC AC ratings provides the best measure of what generation is actually interconnected to the grid.  PG&E explains that the numerator is not based on total customer demand or electricity usage by eligible customers, as both customer demand and usage can vary substantially from year to year.

For the denominator of the equation, PG&E uses the highest peak demand ever achieved in the utility service territory, which includes demand from Community Choice Aggregation and Direct Access customers.  PG&E uses the peak demand reported in Federal Energy Regulatory Commission (FERC) Form 1, and PG&E's highest recorded peak demand was 20,883 megawatts on July 25, 2006.

SCE agrees with PG&E's proposed method, even though it differs slightly from SCE's current method to calculate the NEM cap.  SCE notes that the PG&E method uses system peak demand based on a 60 minute interval, whereas SCE currently uses a system peak demand based on a 30 minute demand interval.  SCE states it is willing to switch to the 60 minute interval system peak demand reported in FERC Form 1 for consistency between the utilities.  Further, SCE asserts that the appropriate measure of aggregate customer peak demand is coincident system peak demand, as proposed by the utilities, since the goal of NEM is to encourage installation of renewable customer generation to reduce system peak demand and to reduce the need for California IOUs to invest in more generating capacity to meet peak load.

### 3.2.  Joint NEM Parties' Proposal

In contrast, the Joint NEM Parties propose a new method for calculating the NEM cap.  While they agree with PG&E and SCE on the numerator of the equation (total generating capacity of NEM eligible customers), they propose a change in the denominator.  The Joint NEM Parties contend that aggregate

customer peak demand should be derived by adding together individual customer peak demand, and should account for the non-coincident nature of customer peak demand (i.e., that demand peaks for different customers at different times).  They maintain that it is incorrect for the utilities to interpret "aggregate customer peak demand" as the highest historical system peak demand in their service territories, also known as "coincident peak demand."

As support for their recommendation, the Joint NEM Parties contend that the plain language of § 2827(c)(1) and fundamental principles of statutory construction require that aggregate customer peak demand be interpreted as a summing of individual customers' peak demand.  According to the Joint NEM Parties, "aggregate customer peak demand" is not the same as "utility peak demand" or "system peak demand."  Utility peak and system peak are terms with commonly understood meaning and significance as coincident peak demand, or the point in time at which the utility's total system demand reaches its highest single point of demand.  In contrast, customer peak demand suggests measuring the maximum peak of individual customers, which may occur at different times and may not occur coincident with system peak.  Thus, aggregate customer peak demand is the summation of each individual customer's peak demand.

Moreover, the Joint NEM Parties contend that the Legislature has regularly used "peak demand" in other statutes to mean coincident peak demand at either the utility or statewide level.[2]  The Joint NEM Parties indicate that the Legislature amended § 2827 by Assembly Bill (AB) 1755 (Stats. 1998, ch. 855) to specifically

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[2]  Joint NEM Parties' comments 1/17/12 at 5, fn 10.

depart from existing language referring to "utility's peak electricity demand" and instead inserted the term "aggregate customer peak demand." Thus, they contend that since the Legislature chose different terminology here, it is inaccurate to assume aggregate customer peak demand is equivalent to system or coincident peak demand. Additionally, they assert that interpreting aggregate customer peak demand identical to utility or system peak demand creates confusion by using inconsistent terminology and renders the modifier "aggregate customer" superfluous. According to the Joint NEM Parties, a cardinal principle of statutory interpretation is that a statute ought to be construed in a way that creates internal consistency and avoids making any "clause, sentence or word superfluous, void, or insignificant." Thus, they maintain that the term "aggregate customer peak demand" refers to measuring the sum of each individual customer's non-coincident peak demand.

PG&E, SCE, SDG&E and DRA disagree with the Joint NEM Parties' proposal to interpret aggregate customer peak demand as the sum of individual customers' non-coincident peak demand. According to PG&E, the Joint NEM Parties attempt a strained interpretation of the phrase "aggregate customer peak demand" which is not reasonable or sensible. As PG&E and SDG&E explain, the first NEM cap, as established by SB 656, was a specific number based on system peak demand. That statute specifically referred to the NEM cap as ".1% of a utility's peak electricity demand forecast for 1996." In 1998, the NEM statutes were modified by AB 1755 to the language still used today. Although the new language refers to an "electric service provider's aggregate customer peak demand," PG&E and SDG&E claim this language was introduced as a result of utility deregulation in order to acknowledge that some customers may now be served by electric service providers (ESPs) separate from the utility. Thus, they

contend the term "aggregate customer" was added to reflect the fact that with newly deregulated markets, some customers were served by ESPs providing service within the electric utility's service territory.  As SDG&E states, an ESP's peak demand was not the same as the utility service area peak demand, so the new term "aggregate customer peak demand" was introduced to refer to the peak demands of both ESPs and the incumbent utilities.[3]

Moreover, SDG&E and PG&E assert that language in various committee and floor analyses related to several bills that have modified § 2827 since the passage of SB 656, including Senate committee analysis of AB 1755, use terms such as "each seller's peak demand," "aggregate peak demand," "utility peak demand," "total peak load," and "electric utility's peak load" when referring to the NEM cap methodology, with no mention of "non-coincident peak demand."[4] Thus, SDG&E and PG&E maintain that the term "aggregate customer peak demand" has consistently been interpreted by the Legislature throughout the last decade as coincident peak demand.

In addition, PG&E notes that various Commission reports on progress toward the cap and California Solar Initiative (CSI) goals have consistently been based on using coincident peak demand as the denominator.[5] PG&E also points

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[3] SDG&E comments 1/27/12 at 3.

[4] PG&E comments 1/27/12 at 6. SDG&E comments 1/27/12 at 2 – 5.

[5] PG&E comments 1/27/12 at 4 – 6.  PG&E cites the 2005 Commission report to the Legislature on the costs and benefits of NEM, Commission bill analysis of AB 560 in 2009, the 2010 report to the Legislature on the costs and benefits of NEM, and an April 2011 evaluation of the CSI program provided to the Legislature by the Commission.

out that Senate floor analysis of SB 1 (Stats. 2006, ch. 132) asserts that NEM creates an additional, substantial subsidy so it is unlikely the Legislature would have intended a denominator as suggested by the Joint NEM Parties that would markedly increase the subsidy without careful consideration of the consequences.[6]

PG&E states that the Joint NEM Parties' proposed denominator relies on data that was non-existent for millions of customers in 1998, when the Legislature first used the phrase "aggregate customer peak demand."  At that time, individual peak demand was only measured for medium and large commercial and industrial customers.  PG&E adds that the statute gives no indication the utilities should try to determine the peak load of millions of their individual customers, and PG&E asserts this would be a difficult undertaking. PG&E notes that the deployment of smart meters will enable the collection of peak load data for residential and small commercial and industrial customers but even then, due to the opt-out provision, individual peak load data will not be available for all customers.  PG&E raises an additional point regarding the administrative complexity of measuring aggregate non-coincident customer peak demand:  even if it could be measured, it would change frequently as there are likely to be some customers who reach new individual peak demands on any given day.  Moreover, it is unclear whether or how the aggregate non-coincident customer peak demand value would be adjusted when customers move or go out of business.[7]

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[6]  PG&E comments 1/27/12 at 4 – 5.

[7]  PG&E comments 1/27/12 at 6 – 7.

DRA agrees with PG&E and SCE that the cap should be based on transparent, publicly available data as the two utilities propose. With regard to the Joint NEM Parties' proposal to sum non-coincident peak load data, DRA states it is unclear if such data exists or can be measured, or what the cost might be of obtaining this data. DRA recognizes that NEM is an important incentive for distributed generation. Therefore, it recommends the Commission consider what it intends to do when the five percent cap is reached, rather than changing the methodology for calculating the cap.

The Joint NEM Parties contend that the sum of individual non-coincident peak demands will be available for virtually all customers by the end of 2012. They claim the data is available for some customers on rate schedules that contain demand charges. For customers without demand charges, Joint NEM Parties claim the installation of smart meters will allow measurement of most customers' peak demand. The Joint NEM Parties assert that for remaining customers without smart meters estimates can be accomplished by using load research data or extrapolating where smart meter data or peak demand data exists for a majority of customers in a class.

## 4. Discussion

We first address the issue of whether the denominator in the NEM cap calculation should be based on each utility's coincident system peak demand or, as the Joint NEM Parties propose, on the sum of each customer's non-coincident peak demand. The Joint NEM Parties' argument rests largely on the interpretation of the phrase "aggregate customer peak demand." Section 2827 does not provide a definition of "aggregate customer peak demand," but the Joint NEM Parties contend that three principles of statutory construction support their position that "aggregate customer peak demand" must not be equivalent in

meaning to coincident peak demand.  First, the Legislature revised the language in § 2827 from "peak electricity demand" to "aggregate customer peak demand" with the passage of AB 1755.  Where the Legislature modifies statutory language with new terminology, it is generally presumed that the Legislature intended a substantive change.  Second, the Joint NEM Parties note that "aggregate customer peak demand" is used exclusively in § 2827, whereas the phrase "peak demand" is used in several other instances where it is understood to mean coincident peak demand.[8]  The Joint NEM Parties argue that the Legislature intended to signify something other than coincident peak demand given that the Legislature's use of the modifying phrase "aggregate customer" is unique to § 2827, and the Legislature avoided the use of inconsistent terminology in order to prevent confusion.  Third, the Joint NEM Parties argue that if the Legislature had intended "aggregate customer peak demand" to simply mean coincident peak demand, the words "aggregate customer" would constitute surplusage, a result that statutory interpretation should avoid.  Additionally, the Joint NEM Parties suggest that the phrase "aggregate customer peak demand" is most plainly interpreted as the aggregation of each "customer peak demand," which is each customer's non-coincident peak.

In contrast to the arguments based on the textual principles of statutory construction made by the Joint NEM Parties, PG&E and SDG&E generally look to legislative staff analysis for evidence of legislative intent.  However, statutory interpretation should begin with an examination of the statutory language itself. PG&E and SDG&E do not refute the Joint NEM Parties' observation that the

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[8]  Joint NEM Parties comments 1/17/12 at 5, fn 10.

words "aggregate customer" would constitute surplusage if the Legislature had intended "aggregate customer peak demand" to mean peak demand.

Taken together, we find the Joint NEM Parties' arguments to be persuasive.  It is clear that the Legislature did not intend "aggregate customer peak demand" to simply mean coincident peak demand.  The phrase "peak demand" is used in multiple instances in the Pub. Util. Code to signify coincident peak demand.  If the Legislature had intended the language in § 2827 to mean coincident peak demand, it would have used the term "peak demand" to avoid surplusage and internal inconsistency in the Pub. Util. Code.

Since § 2827 does not provide a definition of "aggregate customer peak demand," it is our responsibility to interpret the Legislature's intent.  We note that § 2827(a) enumerates several goals of the NEM program, including encouraging substantial private investment in renewable energy resources and stimulating in-state economic growth.  In light of these goals, we conclude that the Joint NEM Parties' interpretation of "aggregate customer peak demand" to mean the sum of all customers' non-coincident peak demands is reasonable and we hereby adopt it.  The electric utilities should use the highest recorded sum of non-coincident peak demands in a calendar year as the denominator for their NEM cap calculations.

PG&E explains in comments that calculating the non-coincident aggregate customer peak demand poses some difficulty due to the lack of data for many customers who have not yet received smart meters.  However, using estimation techniques, such as extrapolating from available smart meter data or using load research data for these customers is a reasonable interim solution.  Within 45 days of the effective date of this decision, the Energy Division should convene a public workshop with SCE, PG&E, and SDG&E and other interested parties to

discuss methods for estimating the individual peak demands of the customers for which the utilities lack demand data and establishing a consistent methodology for calculating non-coincident aggregate customer peak demand. Within 60 days of the effective date of this decision, Energy Division should provide the Administrative Law Judge (ALJ) and assigned Commissioner a recommendation on a methodology for calculating non-coincident aggregate customer peak demand.  Within 90 days of the effective date of this decision, the assigned Commissioner, in consultation with the ALJ and Energy Division, shall issue a ruling with instructions to the utilities on the methodology the utilities must use to calculate non-coincident aggregate customer peak demand.  Within 120 days of the effective date of this decision, the utilities must file Tier 2 advice letters with revised NEM tariffs that conform to the assigned Commissioner's ruling.  The assigned Commissioner or ALJ may modify these dates as necessary.

## 5.    Comments on Proposed Decision

The proposed decision of Commissioner Michael R. Peevey in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure.  Comments were filed by ___ and reply comments were filed by_____ on _____.

## 6.    Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Dorothy J. Duda is the assigned ALJ in this proceeding.

## Findings of Fact

1.  SB 656, which added § 2827 to the Pub. Util. Code, established the NEM program and provided that each utility was not obligated to offer NEM to new

customers once the rated generating capacity of NEM generation reached 0.1 percent of the "utility's peak demand forecast for 1996."

2.  Section 2827(a) enumerates several goals for the NEM Program, including encouraging substantial private investment in renewable energy resources and stimulating in-state economic growth.

3.  AB 1755 modified § 2827 in several respects.  Among other changes, AB 1755 revised the description of the NEM cap calculation from 0.1 percent of each utility's "peak demand" to 0.1 percent of each ESP's "aggregate customer peak demand."

4.  Section 2827 does not define whether "aggregate customer peak demand" refers to coincident peak demand or the aggregation of individual customers' non-coincident peak demands.

5.  The Pub. Util. Code includes multiple instances of "peak demand" in reference to coincident peak demand at either the utility or statewide level. However, the phrase "aggregate customer peak demand" only appears in § 2827.

6.  Data on individual customer peak demand is not available for all customers, but it will be available for the vast majority of customers once the deployment of smart meters has been completed.  Deployment of smart meters is currently scheduled to be completed by the end of 2012.

**Conclusions of Law**

1.  In enacting AB 1755, the Legislature intended a substantive change in the NEM cap calculation when it revised the term "peak demand" to "aggregate customer peak demand."

2.  Because the phrase "peak demand" is used to refer to coincident peak demand in multiple occurrences in the Pub. Util. Code, the words "aggregate

customer" would be superfluous if the Legislature had intended "aggregate customer peak demand" to mean coincident peak demand.

3.  Use of the phrase "aggregate customer peak demand" in § 2827 of the Pub. Util. Code to mean coincident peak demand when the phrase "peak demand" is used elsewhere in the Pub. Util. Code for that purpose would constitute the use of inconsistent and confusing terminology by the Legislature.

4.  The Legislature did not intend "aggregate customer peak demand" to mean coincident peak demand.

5.  It is reasonable to interpret "aggregate customer peak demand" as meaning the aggregation of individual customer peak demands, i.e., customers' non-coincident peak demands.

6.  SCE, SDG&E, and PG&E should use the aggregation of customers' non-coincident peak demands to calculate their caps on NEM participation as set forth in § 2827(c)(1).


# O R D E R

**IT IS ORDERED** that:

1.  Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company shall calculate their respective caps on participation in the net energy metering program as five percent of aggregate customer peak demand, which is defined as the highest sum of all customers' non-coincident peak demands that occurs in any calendar year.

2.  Within 45 days of the effective date of this decision, the Energy Division shall convene a public workshop with Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company,

noticed to all parties in this proceeding, to discuss methods for estimating the individual peak demands of the customers for which the utilities lack demand data and establishing a consistent methodology for calculating non-coincident aggregate customer peak demand.  Within 60 days of the effective date of this decision, Energy Division should provide the Administrative Law Judge and assigned Commissioner a recommendation on a methodology for calculating non-coincident aggregate customer peak demand.

3.  Within 90 days of the effective date of this decision, the assigned Commissioner, in consultation with the Administrative Law Judge and Energy Division, shall issue a ruling with instructions to Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company on the methodology they must use to calculate non-coincident aggregate customer peak demand.

4.  Within 120 days of the effective date of this decision, Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company shall file Tier 2 advice letters with revised net energy metering tariffs that conform to Ordering Paragraph 1 and the instructions that will be issued by the assigned Commissioner in Ordering Paragraph 3 on the methodology for calculating non-coincident aggregate customer peak demand.

5.  The assigned Commissioner or Administrative Law Judge may modify the compliance dates set forth in this order for good cause and as needed to ensure effective implementation of this decision.

6.  Rulemaking 10-05-004 remains open.

This order is effective today.

Dated _____, at San Francisco, California.