

Decision 12-05-036 May 24, 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)

**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:

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

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 (CALSEIA), the Solar Energy Industries Association (SEIA), 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

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.

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

² Joint NEM Parties’ comments 1/17/12 at 5, fn 10.

amended § 2827 by Assembly Bill (AB) 1755 (Stats. 1998, ch. 855) to specifically 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

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

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