

Decision **PROPOSED DECISION OF ALJ LONG** (Mailed 11/17/14)

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

Application of Pacific Gas and Electric Company for 2013 Rate Design Window Proceeding (U39E).

Application 12-12-002  
(Filed December 3, 2012)

**DECISION ON A RATE DESIGN PROPOSAL TO ADOPT AN OPTION R TARIFF FOR PACIFIC GAS AND ELECTRIC COMPANY**

**Summary**

Pacific Gas and Electric Company (PG&E) filed a demand charge cost study and an evaluation of "Option R" for customers on PG&E's rate Schedule E-19 and E-20. PG&E is not the primary sponsor of the proposal; it was filed in compliance with Decision 11-12-053. PG&E met its compliance obligation with this application.

The Option R proposal would reduce the demand charge to certain customers with installed solar systems and impose a higher energy charge. When net-metering is taken into consideration these customers would be paid a higher energy price whenever the customer's production exceeded consumption for the net generation entering PG&E's grid. We find the Option R has not been justified and we decline to adopt the proposal.

There are no rate impacts resulting from this decision and there are no safety related questions with this application because it does not affect electric operations.

This proceeding is closed.

## **1. Background**

Pacific Gas and Electric Company (PG&E) filed this application in compliance with Decision (D.) 11-12-053 to file a demand charge cost study and an evaluation of "Option R" for customers on PG&E's rate Schedule E-19 and E-20, that is, those customers with solar unit production that exceed 10% of the customers' demand. If adopted, Option R would modify these customers' rates to collect a smaller portion of generation and distribution capacity costs through the demand charge and more from the energy charge. This issue was deferred from Application 10-03-014 when the Commission adopted the settlement of all other issues in D.11-12-053.

The primary issue in this proceeding is to determine whether or not some form of Option R should be adopted. The secondary issues, which are only relevant if an Option R is reasonable, include the correct determination of Option R and the reasonable reallocation of cost to all other customers.

## **2. Option R**

Option R is supported by the Solar Energy Industries Association (Solar Industries) who has been active, but unsuccessful, in proposing Option R in previous proceedings which led to the Commission directing PG&E to file an Option R proposal. The Commission can compel a jurisdictional utility to make a good faith filing to illustrate any proposal, such as Option R, but cannot require the applicant to support the proposal.

In testimony at the evidentiary hearing Mr. Beach (Solar Industries) gave this simple explanation of why larger-capacity solar customers would benefit from Option R:

*Option R has [already] been implemented on the SDG&E and Edison systems<sup>1</sup> as an option principally because demand charges present the most significant barrier to customers who install relatively large systems compared to their load. Those are the customers who are most adversely impacted by demand charges. If you install a smaller system compared to your load and one for example that doesn't export much to the grid or maybe doesn't export at all, the differences between Option R and the regular rate are pretty small. And those customers can stay on the existing tariff. ... And I think it's 27 percent of their commercial solar customers have elected Option R. So almost 3 quarters have chosen not to [switch] simply because it wasn't -- wasn't a big deal. (Transcript at 79-80.)*

The same witness also testified that Solar Industries believes Option R should not be limited solely to solar; it should be broadly available to those customers who would see a financial benefit compared to their existing tariff:

*... our proposal is that Option R should be available to customers who install renewable distributed generation systems, generally that qualify for net-metering in California. (Transcript at 7.)*

*It's certainly possible for a solar customer to reduce his demand charges somewhat, but because of the structure of demand charges where the demand charge for a month is based on your highest demand in any 15-minute interval in a particular time-of-use period or for some demand charges in any hour -- because of the way demand charges work, it's difficult for a solar customer to reduce their demand charges by very much. (Transcript at 9.)*

*... the key point that we're trying to make in our testimony is that the ability of a solar customer to reduce demand charges is not commensurate with the value that they provide to the system in terms of the costs they allow PG&E to avoid. (Transcript at 10.)*

The same witness acknowledged that the effect of Option R would be to change energy charges so that net-metering would result in more revenue in certain situations to the customer in payment of its excess generation.

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<sup>1</sup> By settlements, not litigated decisions.

Q - Can customers installing solar also save on the energy charges to the extent that they're able to avoid utility energy usage?

A - Yes. (Transcript at 10.)

Net-metering is the billing arrangement that applies to customers who install solar or other types of renewable distributed generation. And essentially the way it works is that in hours when the output of the solar system exceeds the customer's onsite demand, then power will flow out to the grid and effectively run the meter backwards. And so the under net-metering, the customer attains credits for those exports to the grid based on the - the retail rate that it pays. (Transcript at 11.)

Thus, in summary, Solar Industries want a tariff which reduces the demand charge but has a higher energy charge:

Q - And your -- the big picture of your proposal here is you want to reduce demand charges -- you want to have an option to reduce demand charges and increase the energy charges?

A - Yes, the costs that would not be collected in demand charges are shifted to energy rates. That's right. (Transcript at 11.)

\* \* \*

ALJ LONG: ... does that mean that the energy credit on a peak period, if there's solar power coming into the grid, is then paid at a higher price because you've shifted costs from the demand charge to the energy charge?

THE WITNESS: That's right. And the analysis that I did in my testimony includes those higher credits that the solar customer will earn when the meter runs backwards, so there's nothing -- the analysis that we did is not trying to, you know, hide the fact that you will get a higher credit when the meter runs backwards. (Transcript at 12.)

### **3. Opposition to Option R**

PG&E did not support the adoption of Option R. In Opening Briefs, PG&E, Wal-Mart Stores, and the Energy Producers and Users Coalition all opposed adoption of the specific Option R proposed in this proceeding. The Commission's Office of Ratepayer Advocates did not participate.

#### **3.1. PG&E**

##### **3.1.1. Overview**

PG&E argues the Commission previously rejected an Option R proposal in D.11-12-053, but left open the opportunity for parties to raise the issue here. Based on the record in this proceeding, PG&E argues we should again reject the Option R rate because it violates our longstanding policy in support of demand charges for large customers; is not cost-justified; and would create unneeded new cost shifts among customers at a time when solar customers are already being subsidized by other customers. PG&E further argues Option R is not needed to continue the success of the solar program in PG&E's service area, because solar system costs are rapidly falling and customers on existing rate schedules continue to adopt solar. PG&E asserts that Solar Industries has not justified the need to "reverse course" on the rates adopted just two years ago in D.11-12-053. (PG&E Opening Brief at 1.)

PG&E points out that in D.11-12-053 the Commission approved a settlement between PG&E and numerous other parties<sup>2</sup> which explicitly rejected the Solar Alliance Option R proposal.

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<sup>2</sup> California Large Energy Consumers Association, the California Manufacturers & Technology Association, the [Office] of Ratepayer Advocates, the Energy Producers and Users Coalition, the Energy Users Forum, and the Federal Executive Agencies.

In D.11-12-053, at 12-28, the Commission rejected arguments made by the Solar Alliance (which are similar to the arguments made here by Solar Industries), stating:

- “We are not persuaded by Solar Alliance claims that the Commission’s longstanding policy regarding the use of demand charges has become outdated, given advances in metering technology, and solar and other DG.” (D.11-12-053 at 20.)
- “We are not persuaded that expanding A-6 eligibility and introducing an Option R rate would be cost-justified. We conclude that Solar Alliance’s proposals may result in cost shifting to subsidize the solar facilities.” (D.11-12-053 at 20.)
- “Solar Alliance is seeking to increase peak rates provided to solar customers for exports from the 13 cents per kWh rate in E-19 to a price of 23 cents per kWh under Option R, or over 40 cents per kWh under A-6. We conclude that solar customers on net-metering are currently receiving enough compensation for the costs they allow the utility to avoid.” (D.11-12-053 at 22.)
- “E-19 and E-20 customers are continuing to install solar systems without an A-6 rate or an Option R rate available to them. The business of selling and installing solar panels in PG&E’s service territory can and will continue unaffected by approval of the MLLP Settlement.” (D.11-12-053, at 26-27.)

PG&E argues that the Commission’s willingness to reexamine the issue was limited:

- “While we do not adopt the Solar Alliance proposals based on the record in this proceeding, we believe that additional study is warranted in a subsequent proceeding examining the demand charges in the E-19 and E-20 tariffs, and the extent to which those demand charges may penalize customers with erratic loads by overcharging them for their contributions to systems peaks.... [PG&E shall present a study]. Solar Alliance and/or other interested parties may

introduce a proposal for consideration of an Option R rate in PG&E's Rate Design Window filing." (D.11-12-053 at 28.)

### **3.1.2. Fair Current Demand Charge**

PG&E argues the Commission adheres to the ratemaking philosophy that demand-related costs should be recovered in demand-related charges, including rates applied to a utility's very largest electric customers. Therefore, some share of generation, transmission and distribution capacity costs are properly collected in demand charges for larger commercial and industrial customers, and the rate design objective for fully cost based rates is full collection of these costs in demand charges, i.e., non-energy costs are best recovered through demand charges. (PG&E Opening Brief at 4.)

This matters here because the cost shift proposed in the Option R reallocates costs from a demand charge to a commodity charge: but these customers do not reduce their use of the grid because PG&E still has to provide the same grid capacity to support these customers in case they use the grid during periods of peak demand.

PG&E's witness testified that capacity-related costs are the result of the infrastructure that must be put in place so that electricity can be generated and distributed to customers. This includes, but is not limited to, generators, transmission lines, substations, circuits and final line transformers. If customers are to be served at all times, the utility's facilities must be sufficient to meet each customer's demands during all hours. Additionally, on-peak demand charges are intended to reduce peak demand by providing an incentive for customers to limit their demands during particular periods when generation costs are the highest; i.e., the customer is encouraged to use less energy delivered by the utility's infrastructure when energy costs are highest because of other customers' demand.

#### **4. Relevant Tariffs**

The proposed Option-R affects two tariffs, E-19 and E-20, which are only 2 of 41 different electric rate schedules. PG&E in 2013 had approximately 21,500 customers on the Voluntary E-19 and Mandatory E-19 tariff, and about 1,000 customers on E-20 service, out of a total ~~54,700,000~~631,603 Commercial and Industrial customers.<sup>3</sup> The following descriptions are abstracted from PG&E's Tariff Book:<sup>4</sup>

##### **4.1. Electric Schedule E-19**

###### MEDIUM GENERAL DEMAND-METERED TOU SERVICE<sup>5</sup>

1. **APPLICABILITY:** Initial Assignment: A customer must take service under Schedule E-19 if: (1) the customer's load does not meet the Schedule E-20 requirements, but, (2) the customer's maximum billing demand (as defined below) has exceeded 499 kilowatts for at least three consecutive months during the most recent 12-month period (referred to as Schedule E-19). If 70% or more of the customer's energy use is for agricultural end-uses, the customer will be served under an agricultural schedule. Schedule E-19 is not applicable to customers for whom residential service would apply, except for single-phase and polyphase service in common areas in a multifamily complex (see Common-Area Accounts section).

Customer accounts which fail to qualify under these requirements will be evaluated for transfer to service under a different applicable rate schedule.

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<sup>3</sup> This data is from PG&E's Federal Energy Regulatory Commission 2013 Form 1 at ~~304.1~~page 304.1, line 40.

<sup>4</sup> [http://www.pge.com/tariffs/tm2/pdf/ELEC\\_SCHEDS\\_E-19.pdf](http://www.pge.com/tariffs/tm2/pdf/ELEC_SCHEDS_E-19.pdf).

<sup>5</sup> Implemented by Advice Letter No: 3631-E, filed March 11, 2010.

**4.2. Electric Schedule E-20**

SERVICE TO CUSTOMERS WITH MAXIMUM DEMANDS of 1000 KILOWATTS or MORE

**Initial Assignment:** A customer is eligible for service under Schedule E-20 if the customer's maximum demand (as defined below) has exceeded 999 kilowatts for at least three consecutive months during the most recent 12-month period.

The tariffs show these rate structures are established to allocate rates to a relatively narrowly defined customer group created as a part of the comprehensive rate design process.

**5. Disputed Study Data**

Solar Industries disputed PG&E's conclusions from the study data, offering its own modified, or alternative, results. As discussed below, we find neither party's conclusions justify the adoption of an Option-R.

Solar Industries' witness, Beach, presented testimony arguing that the utility receives revenue from solar customers for generation capacity, transmission capacity, and distribution capacity that he believes to be 1.6 to 19.5 times the cost of service. During the discovery phase of this proceeding, PG&E asserted that it provided a data set containing billing information for 306 E-19 customers who had installed solar during the 2006-2011 period. PG&E stated that the data showed individual customers' usage and demands for twelve months prior to the time each installed its solar unit and for twelve months after. Beach eliminated many customers' information due to data he believed to be incomplete, yielding a data set of 71 customers that he used for his analysis.

PG&E argued that the Solar Industries position is based on only data from these 71 customers, and that it is erroneous to claim the 71 customers' coincident peak demand dropped as a result of installing solar units.

PG&E objects that Beach also eliminated some customers who actually had complete data. Beach then looked at the load of each of the 71 customers at the precise hour that PG&E's system peak occurred, in both the year before and the year after the customer installed its unit. PG&E argues that the resulting difference then was erroneously assumed to be the reduction in demand at the hour of system peak attributable to the solar unit.

(PG&E Opening Brief at 11-13.)

PG&E raises numerous other objections to the Solar Industries position which in total result in inflated system benefits due to solar installations and under-value or ignore the system costs of serving solar customers. PG&E argues based on its own study that an Option-R is not justified.

## **6. Discussion**

In rate design the object of the exercise is to set retail electric prices so that the utility has a reasonable opportunity to recover its authorized revenue requirements while the customers pay a fair rate that is based on the cost to serve them. As noted above, E-19 and E-20 are only two of 41 different rate schedules<sup>6</sup> many of which have detailed sub-sets of options and other adjustments all intended to fairly allocate costs to rates. Here, Solar Industries wants the Commission to indulge them with *Boutique Rates* uniquely designed to solely benefit a very small sub-set of customers, which would result in at least some costs being shifted to other customers, not necessarily limited to the other E-19 and E-20 customers.

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<sup>6</sup> <http://www.pge.com/tariffs/ERS.SHTML#ERS>

This Boutique Rate treatment would in fact enhance the revenues this small set of customers would receive under net-metering. We find that the Option R proposal is unfair and unreasonable; it is in fact unjust and discriminatory. We find that a study based on only 71 customers is not statistically reliable and Solar Industries has not shown that the existing tariff is discriminatory. We also disregard all references to existing Option R rates in effect for other companies because Solar Industries knowingly violates our settlement rules, which clearly state that no settlement is precedential;<sup>7</sup> besides which, any single component of a settlement represents only a portion of a greater compromise that might not reflect the individually justified outcomes for all issues. In other words, what we accept as a part of a comprehensive settlement is not indicative of what we would find on the individual merits nor would the settling parties accept the outcome without the other individual compromises.

#### **7. Safety**

Rate design issues inherently have no safety implications for utility employees, customers, or the general public.

#### **8. Assignment of Proceeding**

Michael R. Peevey is the assigned Commissioner and Douglas M. Long the assigned Administrative law Judge.

#### **9. Comments on Proposed Decision**

The proposed decision was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under

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<sup>7</sup> Rule 12.5.

Rule 14.3 of the Commission's Rules of Practice and Procedure. ~~Comments were filed on \_\_\_\_\_, and reply comments were filed on \_\_\_\_\_ by \_\_\_\_\_.~~ Timely comments and reply comments were filed by the active parties. Additionally, two entities were denied party status and their proposed comments were rejected as untimely when they filed out of time only days before reply comments were due. One minor correction has been made to the text to correct the accidental misstatement of the total number of Commercial and Industrial customers. PG&E and the Energy Producers and Users Coalition oppose Option R and their comments supported the proposed decision. Comments by Solar Industries oppose the proposed decision and advocate for adoption of Option R.

### **Findings of Fact**

1. PG&E complied with D.11-12-053 and filed an Option R rate design proposal.
2. Solar Industries is the principal sponsor of an Option R rate design for solar customers in PG&E's service territory.
3. The only existing Option R rate designs were adopted as an integral part of a comprehensive rate design settlement.
4. The proposed Option R would increase the cost of energy and reduce the demand charge for customers that opt-in to the rate.
5. The proposed Option R would increase the peak energy price paid for the solar generation entering the system under net-metering.
6. The PG&E position in opposition to adopting an Option R is based on its study of 301 relevant solar customers.
7. The Solar Industries position in support of Option R relies on data for a 71 customer subset of the available data.

**Conclusions of Law**

1. The proposed Option R does not reasonably allocate the full cost of service to solar customers for facility costs recovered in a demand charge.
2. The proposed Option R would unreasonably increase the price of energy paid for net energy produced by solar customers.
3. The Option R proposal filed by PG&E and the alternative proposal as supported by Solar Industries are both unreasonable and should be denied.
4. This proceeding should be closed

**O R D E R**

**IT IS ORDERED** that:

1. Pacific Gas & Electric Company shall not implement an Option R rate design for E-19 and E-20 Customers.
2. Application 12-12-002 is closed.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.