BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U 338-E) for Approval of its Proposal to Implement Residential Default Time-of-Use Rates.

Application 17-04-015
(Filed April 14, 2017)

ENVIRONMENTAL DEFENSE FUND’S PROTEST OF SOUTHERN CALIFORNIA EDISON’S PROPOSAL TO IMPLEMENT RESIDENTIAL DEFAULT TIME-OF-USE RATES

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May 18, 2017
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I. INTRODUCTION

Pursuant to Rule 2.6 of the California Public Utilities Commission’s (Commission) Rules of Practice and Procedure, Environmental Defense Fund (EDF) hereby submits the following protest to the Application of Southern California Edison (SCE) for approval of its proposal to implement residential time-of-use (TOU) rates.¹

EDF notes that we are still reviewing the testimony filed by SCE related to this Application; as such, we reserve the right to assert issues at a later point that are discovered after filing this protest.

On April 14th, SCE filed a rate design window application with the Commission seeking permission to start transitioning certain eligible residential customers to TOU rates a few months earlier than the 2019 start date mandated by the Commission. The

rationale for these changes is a perceived onerous transition from the current billing system to a new technology platform and a resultant need to allow technical support staff sufficient time to prepare for the transition. Thus, according to SCE, in order to avoid a wholesale delay in default TOU implementation until the end of 2020, it is necessary to transition a limited subset of customers to default in the last part of 2018 and the rest in the last quarter of 2020; alternatively, they will have to wait to transition all customers until 2020.\(^2\) In addition to this request, SCE seeks approval of their default rate options, expanded bill protections for customers, and a series of “optional” rates that can be available to more sophisticated customers.\(^3\)

Although EDF supports the proposed bill protections for vulnerable households and rate options for more sophisticated customers, EDF protests the proposed delay in TOU rate defaults as in direct conflict with the 2019 timeline set forth in Commission Decision 15-07-001.\(^4\) The SCE delays will result in undesirable economic and environmental impacts caused by the worsening mismatch between utility costs of service, retail rates, and readily available renewable generation capacity that is now being curtailed routinely. Further, EDF finds SCE’s rationale for requesting delay to be illogical and in conflict with known timelines that have been in play for over a decade since, at least, planning began to deploy advanced metering infrastructure (AMI).

\(^3\) Id. at 2.
\(^4\) Decision on Residential Rate Reform for Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company and Transition to Time-of-Use Rates, Order Instituting Rulemaking on the Commission’s Own Motion to Conduct a Comprehensive Examination of Investor-Owned Utilities’ Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations, R. 12-06-013 at 301 (issued Jul. 13, 2015).
II. DISCUSSION

SCE requests the following via its Application:

[a]pproval to implement: (1) an initial (“Wave 1”) transition of a limited, although significant, segment of customers to default TOU starting in Q4 2018; 3 (2) two proposed default TOU rates that SCE previously proposed in its pending Default TOU Pilot that are designed to reflect up-to-date TOU time periods in compliance with D.17-01-006, and to enhance customer acceptance with relatively modest bill impacts on customers who do not change their consumption patterns; (3) a robust bill protection proposal that exceeds the legal requirements of Assembly Bill (AB) 327; (4) a request to provide customers the option of taking service on the proposed rates on an opt-in basis, beginning January 1, 2018; and (5) other aspects, including cost recovery.

Because SCE’s request to implement Wave 1 is time-sensitive, SCE is requesting an expedited schedule in order to obtain a final Commission decision by November 2017.5

Based upon EDF’s review of SCE’s Application and the significant request to delay implementation of residential default TOU rates, EDF raises the following issues with SCE’s Application:

- Transition of a large number of customers in 2020 is in conflict with the intent of the 2019 timeline set forth in Commission Decision 15-07-001;
- SCE has had plenty of time to anticipate transition to a new billing system since the Commission decision was released in 2015, and associated processes that really began a decade ago with the deployment of smart meters for residential rate payers; and
- The structure of the TOU rate does not account for integration of renewables and creates a potential economic disincentive for increased adoption of electric vehicles (EVs).

EDF reviewed SCE’s Application with the foundational belief that the use of time-variant pricing, such as TOU rates, in the residential and non-residential sectors, along with robust marketing and education, presents a meaningful way to link the price of electricity with those times when electricity use is most beneficial to the grid and the

environment. TOU rates can send a powerful signal to an electricity consumer that they should be favoring electricity use when there is an abundance of renewable energy on the grid.

The use of TOU rates will lower the costs of using increasing amounts of renewable energy. This is evidenced by Lawrence Berkeley National Laboratory’s analysis of demand response potential, in which they find that a 20% load shift to solar-powered renewable generation can reduce system costs (i.e., energy and capacity costs) by $700 million per year in 2025. This strategy is important, particularly given the recent 50 percent Renewables Portfolio Standard established by Senate Bill 350. In addition, time-variant retail electricity rates can provide price signals for innovators to provide conservation and storage services. It is the effective and timely implementation of these rates that will provide California with the best path forward in order to minimize near-term economic hardships associated with the clean energy transition, and position California to meet long-term environmental goals.

A. SCE’s proposal is in conflict with Decision 15-07-001 and belies the fact that SCE had adequate time to plan for this transition.

In Decision 15-07-001, the Commission explicitly states “the IOUs must file a residential rate design window (Residential RDW) application no later than January 1,

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2018 that proposes default TOU rate structure to begin in 2019. 9 The intent of the statement is clear: SCE and the other IOUs must transition their customers to TOU rates in 2019.

In EDF’s view, SCE’s application is in contravention of this directive, as at least some customers would be defaulted in 2020 under either scenario. The Commission should not take this delay due to SCE’s poor planning lightly; indeed, allowing for this shift in timeline would potentially give San Diego Gas & Electric and Pacific Gas & Electric motivation to do the same. In other words, Commission acceptance of SCE’s terms would be a dangerous precedent. SCE claims in its Application that only two choices are available: a staggered transition of customers, with the majority of customers transferring in 2020, or a delay of all customers until 2020. The rationale given by SCE for these two options is that SCE plans for implementation of a new customer IT billing system. 10 However, EDF is deeply uncomfortable with the fact that SCE is just now contemplating changes to the billing system, given the knowledge of impending default TOU rates since 2015; additionally this raises the question of how SCE is handling billing for customers already on TOU rates. As well, it is worth noting that AMI deployment planning with the explicit intent of transitioning to time-variant rates began

almost a decade ago. As such, SCE offers no legitimate or compelling reason to support its self-imposed delay of residential default TOU rates for all customers by 2019.

B. The default TOU tariff does not encourage charging at times that increase integration of renewables and may hinder increased adoption of EVs.

SCE’s application preserves a default TOU tariff for EVs that potentially creates an economic disincentive for utilizing renewable generation capacity at a time when California is already curtailing renewable zero emissions resources and is predicted to do so at increasing quantities unless TOU rates, and associated effective messaging, spurs residential and EV demand to shift to align with the sun. It is clear that the growth rate of curtailment is accelerating. Predictions of negative pricing for clean energy resources could hurt the competitiveness of such resources and harm the state’s ability to achieve its clean energy goals. The TOU tariff currently in place does not reflect up-to-date current time-variant costs of providing electricity service, and are not geared toward the changing generation capabilities profile for the State.12

11 Southern California Edison filed an application on July 31, 2007 seeking approval from the Commission to deploy advanced metering infrastructure. An AMI project was approved in a final decision by the Commission in September of the following year. Decision Approving Settlement on Southern California Edison Company Advanced Metering Infrastructure Deployment, Southern California Edison Company’s (U 338-E) Application for Approval of Advanced Metering Infrastructure Deployment Activities and Cost Recovery Mechanism, A. 07-07-026 (issued Sep. 22, 2008) (final decision). Further, a 2004 decision by the Commission required AMI infrastructure to be able to support TOU rates. Joint Assigned Commissioner and Administrative Law Judge’s Ruling Providing Guidance for the Advanced Metering Infrastructure Business Case Analysis, Order Instituting Rulemaking on policies and practices for advanced metering, demand response, and dynamic pricing, R. 02-06-001 (Feb. 19, 2004).

12 See, e.g., California Independent System Operator, CAISO time-of-use period analysis at 9 (“In March 2015, the CAISO published an analysis of hourly net loads to recommend new TOU periods…the significant penetration of renewables and potential oversupply conditions creates an opportunity to encourage consumption during the middle of the day, which corresponds to the minimum demand on the system that must be served by conventional resources”) (Jan. 22, 2016).
In a February 2017 memo, CAISO forecasted the need to curtail 6000 MW to 8000 MW of solar and wind capacity in the spring of 2017.\(^\text{13}\) Since January 2017, CAISO has curtailed an average of ~3800 MW and ~2100 MWh of solar and wind energy (max daily curtailment was 15,458 MW and 12,106 MWh).\(^\text{14}\) These continuing trends highlight an important opportunity for TOU rates to be designed to line up low-priced time periods with times of high curtailment so that customers are incentivized to shift demand to those times. Requiring curtailment of renewables can also result in environmental impact – in 2017, there were an estimated 273,000 tCO2e emissions released due to curtailing renewables and instead using fossil-fueled generation.\(^\text{15}\)

This TOU structure is poorly designed for EV drivers as well. For overnight EV charging, proposed off-peak rates would be anywhere from 22.2 cents to 28.4 cents per kilowatt hour during overnight hours,\(^\text{16}\) which makes little sense from the perspective of encouraging charging at times when the grid is underutilized and/or there is available

\(^\text{14}\) In 2017 so far, CAISO has executed a total of 3,351 hourly curtailment events amounting to over 273,000 MWH and over 501,000 MW of wind and solar energy. Solar energy accounted for the majority of the curtailment (83%), and because of this 90% of the curtailment occurs between 9 AM and 6 PM. Moreover, 98% of the curtailment is classified by CAISO as economic curtailment at the local or system level. Curtailment statistics are calculated using data from January 1, 2017 to May 11, 2017. All curtailment data is compiled from the daily curtailment reports published by CAISO. http://www.caiso.com//market/Pages/ReportsBulletins/DailyRenewablesWatch.aspx
\(^\text{15}\) The upper bound of the potential environmental impacts of curtailments can be estimated by multiplying the emissions rate associated with the electricity supplied by non-renewable resources (units of measure are emissions per MWh by the magnitude of curtailed production (units of measure are MWH). For illustration’s sake, if we assume that all of the curtailed power is instead provided by efficient natural gas generators, the emissions rate for greenhouse gas pollution can be approximated at 0.5 ton of CO2e per MWh of production. Using the 273,000 MWH of curtailment in 2017 thus far, we can estimate an additional 136,500 tCO2e emissions if we are curtailing zero emissions generation while using emissive fossil-fueled generation.
wind or other forms of renewable resources. In addition, pricing energy at such rates, which are effectively higher than their gasoline equivalent,\textsuperscript{17} removes a significant incentive to purchase of electric vehicles. At a time when the state is moving to expand the use of zero-emission transportation, this is a mistake. As well, SCE’s rate structure is contrary to provisions of Senate Bill 350 that discuss transportation electrification – respectively that “deploying electric vehicles should assist in grid management, integrating generation from eligible renewable energy resources, and reducing fuel costs for vehicle drivers who charge in a manner consistent with electrical grid conditions,”\textsuperscript{18} and “deploying electric vehicle charging infrastructure should facilitate increased sales of electric vehicles by making charging easily accessible and should provide the opportunity to access electricity as a fuel that is cleaner and less costly than gasoline or other fossil fuels in public and private locations.”\textsuperscript{19}

III. **CATEGORIZATION, HEARINGS, AND SCHEDULE**

SCE requests the Application be categorized as “ratesetting” and leaves room for the possibility of evidentiary hearings, to be determined by the administrative law judge (ALJ).\textsuperscript{20} EDF has no opposition on either count.

In addition, SCE has requested expedited determination by the Commission on its Application.\textsuperscript{21} EDF understands the need for a timely resolution, but believes the

\textsuperscript{17} With one gallon of gasoline roughly equivalent to about 33.7 kWh of electricity (http://www.afdc.energy.gov/fuels/fuel_comparison_chart.pdf), the low-end of off-peak TOU rates would result in a gasoline-equivalent price of $5.93 to $8.89 ($0.22/kWh x 33.7 kWh +/- 20% error to account for differences in the energy intensity of gasolines and conversion efficiencies of fueling systems), well above even the most expensive gas prices in California (http://www.californiagasprices.com/).


\textsuperscript{19} Id., Sec. 740.12(a)(1)(H).

The schedule proposed by SCE does not give stakeholders with limited capacity a meaningful opportunity to offer thoughtful and informed responses. EDF would therefore offer a slightly modified schedule as follows:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Prehearing Conference</td>
<td>May 22, 2017</td>
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<tr>
<td>Scoping Memo</td>
<td>June 30, 2017</td>
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<tr>
<td>ORA and Intervenor Testimony Due</td>
<td>July 14, 2017</td>
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<tr>
<td>Rebuttal Testimony Due</td>
<td>July 28, 2017</td>
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<tr>
<td>Evidentiary Hearings (if necessary)</td>
<td>August 10-11, 2017</td>
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<tr>
<td>Concurrent Opening Briefs</td>
<td>August 31, 2017</td>
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<tr>
<td>Reply Briefs</td>
<td>September 11, 2017</td>
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<tr>
<td>ALJs issue Proposed Decision</td>
<td>October 2017</td>
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<tr>
<td>Comments to Proposed Decision</td>
<td>20 days after service of PD</td>
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<tr>
<td>Replies to Comments to Proposed Decision</td>
<td>5 days after opening comments on PD filed</td>
</tr>
<tr>
<td>Commission issues Final Decision</td>
<td>November 30, 2017</td>
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21 Id. at 14.
IV. **CONCLUSION**

EDF respectfully submits this protest on the limited issues described above, and recommends that the Commission adopt a schedule that balances the need for timely action on the Application while allowing adequate time for discovery and analysis.

Respectfully signed and submitted on May 18, 2017.

ENVIRONMENTAL DEFENSE FUND

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