

April 25, 2022

**ADVICE 4684-E-A**  
**(U 338-E)**

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA  
ENERGY DIVISION

**SUBJECT:** Supplemental to Tier 2 Advice Letter for Southern California Edison Company's Dynamic Rate Pilot Pursuant to Decision 21-12-015

**PURPOSE**

Southern California Edison Company (SCE) submits this supplemental advice letter (AL) to provide additional information on its Dynamic Rate Pilot (the Pilot), initially described in Advice 4684-E filed January 5, 2022 in compliance with Decision (D.) 21-12-015 (the Decision).

The purpose of this supplemental AL is to provide additional information requested by California Public Utilities Commission (Commission) staff on (1) Formula of Price Curves and Rationale for Shape Chosen, (2) Inflection Points for Curves and Rationale for those Inflection Points, (3) Revenue Targets for Each of the Component Curves, (4) Illustrative Prices, (5) Addressing "Revenue Neutrality."

SCE requests approval, in compliance with the Decision, for Pilot activities to start no later than May 1, 2022. This advice letter supplements in part and does not change the substance of the original AL 4684-E.

**BACKGROUND**

The Commission issued the Decision on December 6, 2021. Ordering Paragraph (OP) 59, OP 60, and Attachment 1 of the Decision authorized SCE to conduct the Pilot to study how price responsive pilot projects can enhance system reliability in 2022 and 2023. In compliance with OP 63 of the Decision, SCE submitted Advice 4684-E to address the Pilot's scope, partners, shadow bill implementation, dates, and tariff design. At the request of the Commission's Energy Division, SCE is filing this supplemental AL to provide additional details on the Pilot's design.

## **Discussion**

SCE began work to implement the Pilot shortly after the Decision was issued, including weekly discussions regarding the Pilot design elements and operational requirements with TeMix, Inc. (TeMix). In addition, SCE has approached and discussed the Pilot with a wide range of Automated Service Providers (ASPs) in order to enroll residential, commercial, and industrial customers with smart enabling price-responsive end-uses, such as electric vehicle charging, behind-the-meter batteries, and controllable loads. The transactive platform services contract with TeMix is in the final stages of procurement, as are the service contracts with several ASPs. Internal processes for the development of the transactive rate design elements, the shadow bill strategy, ASP software integration, daily local grid level forecasting, and meter data transfers are near finalization and will soon be ready for beta testing prior to full Pilot operation.

SCE provides the following additional information regarding the implementation of the Pilot.

### **1. Formula of Price Curves and Rationale for Shape Chosen**

SCE's chosen quadratic price curve is intended to recover fixed costs along the entire duration of the load curve, as opposed to the typical applications of concentrated fixed cost recovery used in standardized TOU rate design. Concentrated recovery of fixed costs using a flat-adder threshold basis can cause steep cross-hour price differentials that are likely to be bypassed by resources that are acutely flexible and can create compounding effects on cross-hour load impacts on the grid. SCE believes that the formulaic definition of these dynamic price curves can be refined through iterative cycles and regression analysis on the causal effects of price on load determinants and/or customer responsiveness. However, SCE believes that the continuity of recovery along the entire duration of the load curve is an important element that should be considered in the determination of a price function for long-run fixed cost recovery.

### **2. Inflection Points for Curves and Rationale for those Inflection Points**

SCE's Inflection points were selected to enable fixed cost price signals for both Peak Load and Min Load conditions. The inflection point is selected as load basis when heat rates sink to some measure of system P-Mins during times of renewable over-supply and when non-renewable resources may need to continue to perform in times of increasing supply of renewable resources. The inflection points also provide a capacity signal that helps mitigate renewable curtailment by providing price-sensitive sink-resources a negative capacity price to soak-up excess renewable supply while maintaining some correlation to how the system experiences load through the course of the year.

### **3. Revenue Targets for Each of the Component Curves**

Revenue Targets will be assessed based on the revenue components authorized by the Commission for each revenue component included in the customer's otherwise applicable tariff (OAT).

### **4. Illustrative Prices**

SCE provided its confidential Illustrative Pricing Model to Energy Division on April 8, 2022 as a data request response.

### **5. Addressing "Revenue Neutrality"**

The customer's bill under the Dynamic price plus Subscription offering would approximate the customer's bill under the OAT, assuming the customer does not change from a pre-determined baseline of electricity usage. Revenue neutrality for the subscription portion of the customer's bill is achieved through the revenue-neutral design of the OAT. Revenue neutrality for the dynamic price portion of the customer's bill is achieved by scaling the raw marginal cost curves by the Equal Percent Marginal Cost (EPMC) scalar for each revenue component from SCE's GRC. Non-bypassable costs and other costs associated with the State and Commission's programs and policies will be included as a flat rate adder that equals the corresponding rate components currently contained in the customer's OAT, and will be applied to each hour of the dynamic price curve. Grid-related distribution costs as determined in SCE's GRC will be included as a flat rate (cents/KWh) in the total dynamic rate. Transmission-related costs will continue to be assessed based on the billing determinants as described in the customer's OAT and will be excluded from the Dynamic Price curve.

## **PROTESTS**

SCE asks that the Commission, pursuant to GO 96-B, General Rule 7.5.1, maintain the original protest period designated in Advice 4684-E and not reopen the protest period.

## **TIER DESIGNATION**

This supplemental advice letter is submitted with a Tier 2 designation, the same tier designation as AL 4684-E.

## **EFFECTIVE DATE**

SCE respectfully requests this supplemental advice letter become effective concurrent with original Advice 4684-E, on February 4, 2022.

## **NOTICE**

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice filing to the interested parties shown on the attached GO 96-B, R.20-11-003, A.17-01-012, et al., R.13-09-011 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to [AdviceTariffManager@sce.com](mailto:AdviceTariffManager@sce.com) or at (626) 302 4039. For changes to all other service lists, please contact the Commission's Process Office at (415) 703 2021 or by electronic mail at [Process\\_Office@cpuc.ca.gov](mailto:Process_Office@cpuc.ca.gov).

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice letter at SCE's corporate headquarters. To view other SCE advice letters submitted with the Commission, log on to SCE's web site at <https://www.sce.com/wps/portal/home/regulatory/advice-letters>.

For questions, please contact Patrick Nandy by electronic mail at [Patrick.Nandy@sce.com](mailto:Patrick.Nandy@sce.com).

**Southern California Edison Company**

/s/ Shinjini C. Menon  
Shinjini C. Menon

SCM:pn:jm



# ADVICE LETTER SUMMARY

## ENERGY UTILITY



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

Company name/CPUC Utility No.:

Utility type:

ELC       GAS       WATER  
 PLC       HEAT

Contact Person:

Phone #:  
E-mail:  
E-mail Disposition Notice to:

EXPLANATION OF UTILITY TYPE

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

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #:

Tier Designation:

Subject of AL:

Keywords (choose from CPUC listing):

AL Type:  Monthly     Quarterly     Annual     One-Time     Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

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:

No. of tariff sheets:

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

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>:

Pending advice letters that revise the same tariff sheets:

<sup>1</sup>Discuss in AL if more space is needed.

**Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:**

California Public Utilities Commission  
Energy Division Tariff Unit Email:  
[EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Contact Name:  
Title:  
Utility/Entity Name:  
  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

Contact Name:  
Title:  
Utility/Entity Name:  
  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

CPUC  
Energy Division Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102

## ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	