SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

Connor Flanigan
Managing Director, State Regulatory Operations

May 29, 2024

ADVICE 5284-E-A
(U 338-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

SUBJECT: Supplement to 5284-E, Southern California Edison Company's Flexible Demand Response Pilot

Southern California Edison Company (SCE) hereby submits to the California Public Utilities Commission (CPUC or Commission) the following changes to its tariffs. The revised tariff sheets are listed on Attachment A to this advice letter.

PURPOSE

This advice letter supplements Advice 5284-E, SCE's Flexible Demand Response Pilot ("Flex DR pilot" or the "Pilot"), submitted in accordance with Decision (D.)23-12-005, and provides additional detail to clarify eligibility for customer participation and to address cost recovery for the Flex DR pilot. This supplement proposes that participation in and cost recovery for the Flex DR pilot would be limited to SCE bundled service accounts.

These changes are made in accordance with General Order (GO) 96-B, General Rule 7.5.1, which authorizes utilities to make changes to an advice letter through the submittal of a supplemental advice letter. This advice letter supplements Advice 5284-E in part, and will not otherwise change the substance of the original Advice 5284-E.

BACKGROUND

On April 29, 2024 SCE submitted Advice 5284-E providing detail on the Flex DR pilot as directed in D.23-12-005. On the same day, SCE received by email an inquiry from the California Choice Energy Authority (CalChoice) asking whether the Pilot is open to water and wastewater sector customers of Community Choice Aggregations (CCAs), and if not, whether SCE is willing to submit a supplement to Advice 5284-E making this clarification.

SCE received no protests to Advice 5284-E but submits this supplement in light of CalChoice's request.

DISCUSSION

SCE proposes to limit participation in the Flex DR pilot to bundled service accounts only (i.e., service accounts for which SCE serves as the Load Serving Entity (LSE)). A shift in energy consumption toward periods with excess generation benefits supply-related aspects of service. The potential direct supply-related cost reductions that may result from the Pilot would only pertain to generation-related aspects of service. Were service accounts served by other LSEs allowed to participate, SCE would not be able to retain any generation-related cost reductions that may result from the Pilot for the benefit of SCE's customers as those generation-related cost reductions would accrue to the participating service account's LSE.

If unbundled service accounts (i.e., those served by LSEs other than SCE) are ineligible to participate, then they should not bear the cost of the Pilot. Further, Pilot costs should be recovered from the customers who may benefit from potential direct generation-related cost reductions that accrue to SCE. SCE proposes to limit cost recovery to bundled service accounts by recovering costs through the generation rate component via the Demand Response Program Balancing Account (DRPBA)-Generation Sub-Account.

PROPOSED CHANGES

SCE proposes the following changes to the original text of Advice 5284-E:

- The addition of the following text to the end of the section titled "What incentives will be offered, and to whom?" under "1. Pilot Scope"

  "As any direct cost reductions from reducing overgeneration and renewable curtailment would be limited to generation-related aspects of service, SCE proposes to limit participation in the Pilot to only bundled service accounts (i.e., to those service accounts for which SCE is the Load Serving Entity)."

- The addition of the following text to the end of Section "4. Budget and Timeframe"

  "To recover costs from the same customers who may benefit from direct generation-related cost reductions from the Pilot, SCE proposes to recover all costs for the Pilot from bundled service accounts via the generation rate component. Proposed edits to Preliminary Statement Part Y-Demand Response Program Balancing Account (DRPBA)-Generation Sub-Account are shown in Attachment A to Advice 5284-E-A."

- The correction of the spelling of the word "Settlement" in Section "4. Budget and Timeframe"

The changes described above are provided in redline to Advice 5284-E as Attachment B.

PROPOSED TARIFF CHANGES

Proposed edits to Preliminary Statement Part Y-Demand Response Program Balancing Account (DRPBA)-Generation Sub-Account are shown in Attachment A. These edits shift cost recovery for the Pilot from distribution rates to generation rates.

TIER DESIGNATION

Pursuant to GO 96-B, Energy Industry Rule 5.2, and Ordering Paragraph 51 of D.23-12-005, this advice letter is submitted with a Tier 2 designation, which is the same Tier designation as Advice 5284-E.

EFFECTIVE DATE

This supplemental advice letter is requested to become effective on the same day as the original advice letter, Advice 5284-E, which is May 29, 2024.

PROTESTS

SCE asks that the Commission, pursuant to GO 96-B, General Rule 7.5.1, maintain the original protest and comment period designated in Advice 5284-E and not reopen the protest period.

NOTICE

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice letter to the interested parties shown on the attached GO 96-B and A.22-05-002 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or at (626) 302-6838. 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.

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 Danny Waggoner at (818) 838-5513 or by electronic mail at danny.waggoner@sce.com.

Southern California Edison Company

/s/ Connor Flanigan
Connor Flanigan

CF:dw:lp

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

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

Company name/CPUC Utility No.: Southern California Edison Company (U 338-E)

Utility type:
☑ ELC ☐ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Darrah Morgan
Phone #: (626) 302-2086
E-mail: AdviceTariffManager@sce.com
E-mail Disposition Notice to: AdviceTariffManager@sce.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5284-E-A

Tier Designation: 2

Subject of AL: Supplement to 5284-E, Southern California Edison Company's Flexible Demand Response Pilot

Keywords (choose from CPUC listing): Compliance, Demand Response

AL Type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:
Decision 23-12-005

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: 5/29/24

No. of tariff sheets: -3-

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: See Attachment A

Service affected and changes proposed[1]:

Pending advice letters that revise the same tariff sheets:

[1]Discuss in AL if more space is needed.

Clear Form

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

Contact Name: Connor Flanigan
Title: Managing Director, State Regulatory Operations
Utility/Entity Name: Southern California Edison Company

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: AdviceTariffManager@sce.com

Contact Name: Adam Smith c/o Karyn Gansecki
Title: Director, Regulatory Relations
Utility/Entity Name: Southern California Edison Company

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: karyn.gansecki@sce.com

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

Clear Form

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
Curtailable 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	

Clear Form

Cal. P.U.C. Sheet No.	Title of Sheet	Cancelling Cal. P.U.C. Sheet No.
Revised 88415-E	Preliminary Statements Y	Revised 87442-E
Revised 88416-E	Table of Contents	Revised 88189-E
Revised 88417-E	Table of Contents	Revised 87418-E

PRELIMINARY STATEMENT Sheet 6

(Continued)

Y. Demand Response Program Balancing Account (DRPBA) (Continued)

2. Definitions. (Continued)

2023 Bridge Authorized Incentive Programs Incremental Funding Levels ($000) – D.22-12-009/

Year	Distribution	Generation[1/]	Total
2023	115,854	0	115,854

[1/] All amounts are distribution-related.

(11) 2024 - 2027 Authorized Administrative and Incentive Program Funding – D.23-12-005

Authorized Incremental Program Funding Levels ($000)[1/]

Year	Distribution	Generation	Total
2024	42,356	1,270	43,626
2025	42,356	1,270	43,626
2026	42,356	1,270	43,626
2027	42,355	1,269	43,624

(T)
(T)

[1/] These annualized amounts when included in rate levels will include associated FF&U.

2024-2027 Authorized Program Incentive Funding Levels ($000) (T)

Incentive Program	2024	2025	2026	2027	Total
Distribution Rate Recovery					
Base Interruptible Program (BIP)	66,650	67,514	68,237	68,908	271,310
Ag & Pumping Interruptible (AP-I)	4,585	4,611	4,651	4,691	18,538
Summer Discount Plan (SDP)	29,814	29,495	29,200	28,925	117,435
Smart Energy Program (SEP)	4,027	4,556	5,017	5,418	19,018
Capacity Bidding Program (CBP)	1,052	13,110	13,110	13,110	40,382
Generation Rate Recovery					
Flexible DR Pilot	125	250	250	175	800

(T)
(T)

(12) 2018 Click Through Process Authorized Funding ($000)

Authorized in Resolution E-4868	$1,500
Authorized in Resolution E-4935	$3,200

(Continued)

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PRELIMINARY STATEMENT:

(Continued)

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Cal. P.U.C.
Sheet No.

PRELIMINARY STATEMENT: (Continued)

(Continued)

Attachment B

Edits in Redline to Advice 5284-E

SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

Connor Flanigan
Managing Director, State Regulatory Operations

April 29, 2024

ADVICE 5284-E
(U 338-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

SUBJECT: Southern California Edison Company's Flexible Demand Response Pilot

In accordance with California Public Utilities Commission (CPUC or Commission) Decision (D.) 23-12-005 (or the Decision), Southern California Edison Company (SCE) hereby submits this Advice Letter detailing program specifics for its Flexible Demand Response Pilot ("Flex DR pilot" or the "Pilot"). The CPUC Executive Director authorized an extension of time to May 1, 2024 for SCE to submit this Advice Letter.

PURPOSE

Pursuant to Ordering Paragraph (OP) 51 and page 156 of D.23-12-005, this advice letter sets forth program design, implementation, and evaluation details for the Pilot.

BACKGROUND

In D.17-12-003, the Commission directed SCE, Pacific Gas and Electric Company, and San Diego Gas & Electric Company (collectively, the investor-owned utilities or IOUs) to file their 2023-2027 Demand Response (DR) Applications on November 1, 2021.[1] A September 30, 2021 letter issued by the Commission's Executive Director extended the Application deadline to May 2, 2022. On May 2, 2022, the IOUs filed their respective 2023-2027 DR Applications which were consolidated by the assigned Administrative Law Judges (ALJs) on May 25, 2022 (A.22-05-002 *et al.*).

In A.22-05-002 *et al.* Exhibit SCE-03,[2] SCE proposed the Flex DR pilot to demonstrate the viability of leveraging water systems to reduce renewable curtailment through shifting consumption to periods of overgeneration. Funding for program year 2023 was split off from the rest of the funding cycle and approved separately as a bridge year in

1 D.17-12-003, OP 61.
2 Exhibit 3 – SCE's Proposed Demand Response Programs by Category, A.22-05-002 et al., May 2, 2022 at pp. 83-94.

D. 22-12-009.[3] On December 20, 2023, the CPUC issued *Decision Directing Certain Investor-Owned Utilities' Demand Response Programs, Pilots, and Budgets for the Years 2024-2027* (D.23-12-005). In D.23-12-005, while the Commission approved funding for the Pilot, it directed SCE to submit a Tier 2 Advice Letter by March 15, 2024 to provide additional detail, "including what load shifting amounts will be required of participations, what incentives will be offered, to whom, and when and how events will be called."[4] The Decision also directed SCE to provide an evaluation, measurement and verification (EM&V) plan in the advice letter and to conduct a performance evaluation by the end of 2026 that is to be submitted with SCE's next DR application.[5]

On February 7, 2024, SCE submitted a letter the Executive Director of the CPUC to request an extension of time until May 1, 2024 to submit the Advice Letter providing additional detail on the Pilot. On February 21, 2024, the Executive Director granted the extension request.

DISCUSSION

The Pilot is intended to assist SCE in determining the potential for operators of water and wastewater systems to participate in a new DR program to fill a critical role in California's resource strategy by providing flexible demand during periods of excess renewable energy during the months of February through May when overgeneration is most likely to occur.

1. Pilot Scope

SCE, in collaboration with water and wastewater sector customers, will develop flexible demand management strategies for increasing useful electric load during periods of excess renewable energy within the California wholesale energy markets. The economic benefit of mitigating the curtailment of renewable generation is a significant opportunity that has not been addressed by retail DR programs. The timing and duration of these opportunities, the identification of the most cost-effective strategies that customers could adopt, and a recommendation for future DR program design, will be the targeted core deliverables from the Pilot.

When and how will events be called?

SCE will develop a dispatch strategy to coincide when excess renewable generation resources are being curtailed by the CAISO (California Independent System Operator). Working with customers and their operational schedules, SCE will identify an approach to synchronize the timing and duration of the customer demand flexible response with

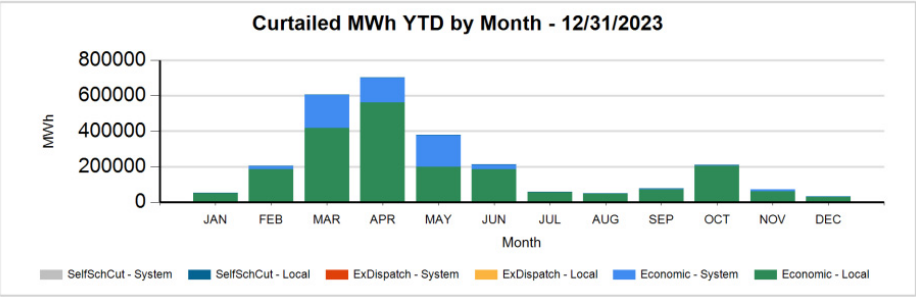
[3] D.22-12-009, OP 2, at p. 47.
[4] D.23-12-005 at p. 156.
[5] Id.

episodes of renewable energy oversupply at the wholesale market. This approach will help SCE identify when the Pilot dispatch events will be called to optimize the renewable energy curtailment mitigation strategies, and how customer operations can be shifted in response.

The dispatch protocols for the Pilot have yet to be established, in terms of frequency, notice, and methodology. The frequency of dispatch will be heavily dependent on the participant resource capabilities, which are driven by the underlying customer technical and operational abilities. The lead time for advance dispatch notifications is also likely to be based on customer operational constraints. As for the dispatch methodology (the notification process), there is a wide range of pre-existing communications protocols that can be adopted. Those include automated secure electronic communications such as Open Automated Demand Response (OpenADR),[6] which is already utilized for many existing DR programs. SCE will work with customers in the early phase of the Pilot to develop and define the dispatch protocols for Pilot operations.

Below in Figure One are the historical renewable energy curtailment periods (periods of high curtailment are the key potential months for Pilot events), as identified by the CAISO in its Solar and Wind Curtailment Report for December 2023[7]:

Figure One



From Figure One, the CAISO data show that excess renewable supply is at its highest (and subsequently curtailed) during the early months of the year (winter and spring), when electric system demand is often lower due to cooler weather. In contrast, excess renewables are at their lowest during the summer months when demand is higher. The Pilot will examine how the opportunities for customer flexibility operations during the

6 OpenADR In a Nutshell, Open ADR Alliance, available at: https://www.openadr.org/assets/docs/DTECH2015/what%20is%20openadr.pdf.

7 Managing Oversupply, California Independent System Operator, available at: https://www.caiso.com/informed/Pages/ManagingOversupply.aspx

winter and spring months can be coordinated to develop an effective oversupply mitigation strategy. This approach is conceptually a paradigm shift from the timing of traditional DR programs, which focus on ensuring system reliability during the summer months.

What load shifting amounts will be required of participants?

The Pilot does not have a specific amount of load shifting that will be required. SCE, in partnership with customers, will evaluate the technical potential of individual or aggregated end-use flexibility strategies based on each customer's operational capabilities and the overall sector. In the past, different end-use loads related to groundwater extraction, delivery, and pumped water storage have participated in traditional summer DR programs with "shed" events. Those load shift characteristics have been documented in current and past DR programs and have also been demonstrated for voluntary State emergency events. However, the Pilot is addressing a different seasonal paradigm for load flexibility (winter and spring) and will need to evaluate and test whether water systems can meet the flexibility requirements related to the oversupply mitigation strategies (a.k.a. "load up"). SCE, working with customers, will evaluate the effects on operations at each site, identify the amount of load shift achieved, document the results, and may develop a "minimum" load shift requirement based on customer system potential.

What incentives will be offered, and to whom?

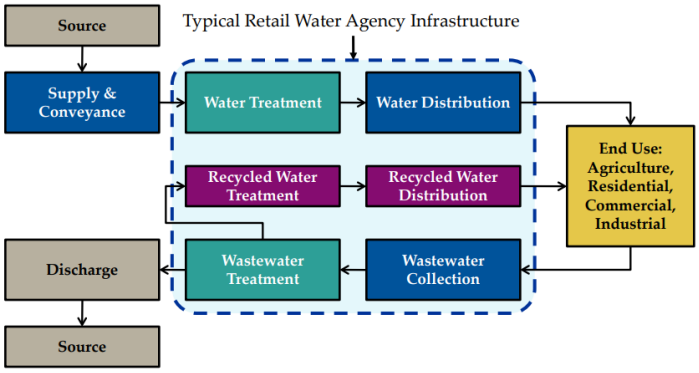
There are several approaches being considered for customer incentives in the Pilot, such as a performance capacity payment to the customer of $/kW-month based on frequency and duration of dispatch, tariff riders on the otherwise applicable tariff (OAT), and/or adjustments to the OAT to offset bill costs that result from shifting. Early discussions with customers have indicated that barriers to participation in any utility pilot or program can vary. Customers have indicated often that non-financial incentives can have more value for them, such as services to provide engineering assistance, training, and other customer-related technical support that have been identified by the water sector facilities staff. Further discussions with customers as the Pilot is initiated will provide more detailed information to develop a set of customized incentive solutions that may include financial performance payments, equipment subsides, or in-kind services that can best meet the needs of each customer.

As any direct cost reductions from reducing overgeneration and renewable curtailment would be limited to generation-related aspects of service, SCE proposes to limit participation in the Pilot to only bundled service accounts (i.e., to those service accounts for which SCE is the Load Serving Entity).

2. How the Pilot Will Address a DR Goal or Strategy

When responding to the appropriate economic signals, water sector customers can provide the significant price-responsive reliability demand-side resources that both meet the needs for renewable over-generation mitigation (load up) and system demand reduction ("shed"). The Pilot will aim to identify how these customers can integrate demand flexibility into their long-term capital planning and day-to-day operations of water transmission, treatment, pumping, and processing. As seen in Figure Two, there are a wide range of electric end-use loads in the water sector that can be optimized to provide the needed flexibility for current and future DR strategies to enhance overall DR potential.

Figure Two[8]



D.23-12-005 described the Pilot's concept as "novel, with little precedence in DR programming."[9] It further stated "[t]he research has the potential to provide significant insight into the use of the water sector for load shifting and to solve grid resiliency issues."[10] The Pilot findings are expected to further inform and assist SCE and other interested stakeholders in developing parallel strategies, design, and program infrastructure for future models of demand flexibility offerings or other flexible DR program designs targeting a wider range of non-water customer sectors.

3. Specific Objectives and Goals for the Pilot

The Pilot will demonstrate the ability of water sector customers to provide renewable

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[8] Refining Estimates of Water Usage in California, Publication CEC-500-2006-118, California Energy Commission, 2006.
[9] D.23-12-005 at p. 156.
[10] D.23-12-005 at p. 156.

curtailment mitigation via demand flexibility operational changes. Specifically, the Pilot will:

- Demonstrate the technical viability and economic value for SCE and its customers, stakeholders, and constituents of leveraging the flexibility in California's water system to provide cost-effective renewable curtailment mitigation to the State's renewable energy resources;
- Inform the design of a cost-effective Flexible Demand Response ("Flex DR") Program;
- Improve future efforts for optimized planning, including water sector capital investment infrastructure forecasting, to support cost effective and widespread flexible resources as they come on-line; and help optimize grid infrastructure investments by facilitating water sector input about planned developments, siting plans, and resiliency needs for water sector operations;
- Enable water sector customers participating in the Pilot to provide as much load shift as can be reasonably accommodated during the oversupply season in the winter and spring months.

Goals for the project include developing a suite of longer-term solutions for water-sector demand flexibility. A three-pronged approach would be prudent to develop the longer-term goals for demand flexibility:

- Expedite the near-term development of water sector flexible demand resources and examine "low hanging fruit" for immediate deployment,
- Develop "shovel ready" flexible demand strategies into current and future water sector resources, infrastructure, and operations, and
- Submit a cost-effective and scalable Flex DR program design for the 2028-2032 DR program application to enable additional opportunities and benefits in the water sector that the Pilot identifies.

4. Budget and Timeframe

The Pilot is authorized for four years and is planned to commence after approval of this Advice Letter. As soon as the Pilot is authorized, SCE will accelerate activities to directly enroll customers who have already been identified as having the highest opportunity for successful participation. The general planned cadence of Pilot activities is illustrated below. While SCE will endeavor to keep to this tentative schedule, the timing of activities may vary depending on the availability of resources within water sector participants and on participants' key priorities and concerns.

Year One (2024) – SCE would assess potential participants' water sector energy utilization through load analysis and engineering review of their operations throughout the year and begin enrollments. Simultaneously, SCE would develop incentive and dispatch strategies and would coordinate with wholesale energy market stakeholders such as CAISO to identify key needs for excess renewable mitigation and resource flexibility. Early dispatch testing could be conducted beginning Q3 2024 through 2025.

Year Two (2025) – SCE would implement the dispatch strategies during the key renewable oversupply months of February, March, April, and May and examine the efficacy of managing a range of end uses under the different operational strategies and develop a collaborative plan for alignment with market signals and grid needs.

Year Three (2026) – SCE would continue improving dispatch strategies and would encourage more customer particpation for Q1 and Q2 of that year. SCE would also conduct additional dispatches and data collection, assess the efficacy of the notifications and mitigation strategies at the customer sites, and prepare for the performance evaluation that is required by the end of 2026, to be submitted with the next DR program cycle application (2028 - 2032).

Year Four (2027) – This is the last year of the Pilot, and it would continue with dispatch operations for Q1 and Q2 during oversupply periods and the Pilot would be gathering more data to identify benefits and capture load impacts and other metrics to support cost-effectivness calculations. Settlements and any true-ups would be finalized by Q3 of this year.

Deleted: SettItements

Funding has been authorized by the Commission in D.23-12-005 for four years, and the start date is dependent on approval of this Advice Letter

The full four year budget from D.23-12-005 is provided below in Figure Four:

Category 5 - 2024-2027 SCE Flexible DR Budget (in $ millions)

	($ in millions)	2024	2025	2026	2027	Total
Requested	Administrative	$1.139	$1.393	$1.478	$1.046	**$5.056**
	Incentives	$0.125	$0.250	$0.250	$0.175	**$0.800**
Authorized	Administrative	$1.139	$1.393	$1.478	$1.046	**$5.056**
	Incentives	$0.125	$0.250	$0.250	$0.175	**$0.800**
	Total	$1.26	$1.64	$1.73	$1.22	**$5.86**

Figure Four

To recover costs from the same customers who may benefit from direct generation-related cost reductions from the Pilot, SCE proposes to recover all costs for the Pilot from bundled service accounts via the generation rate component. Proposed edits to Preliminary Statement Part Y-Demand Response Program Balancing Account (DRPBA)-Generation Sub-Account are shown in Attachment A to Advice 5284-E-A.

5. Relevant Standards and Metrics

The Pilot will assess certain standards and metrics that address the water sector's safety concerns such as those pertaining to water quality, recycling, and wastewater disposal when responding to dispatch signals. Water and wastewater utilities will also need to operate their systems prudently with cost containment in mind given their existing electricity rates. Dispatch protocols are also important standards to develop for this Pilot. SCE will examine each customer's oportunities for maximizing their flexibility and develop the appropriate advance notice period for dispatches. With advance planning, more flexible DR capabilities may be enabled when there is a close coordination between day ahead and week ahead water and wastewater system operations.

The Pilot will plan to utilize the following metrics as it relates to these efforts:

- Actual performance of water sector demand flexibility resources versus expected performance, taking into account operational necessity at the customer site.
- Number and duration of events, and flexibility of water sector resources.
- Forecasted vs. actual oversupply dispatch periods (accuracy of event notice).
- Availability and ease of implementation of changes or adjustments to software systems and enabling technologies.
- Concurrence of the dispatch with "peak curtailment" periods, hourly and daily.
- Degree of customer satisfaction with the Pilot implementation and event participation.

6. Methodologies to Test Cost Effectiveness of the Pilot

The Pilot will not be evaluated specifically for program cost-effectiveness consistent with CPUC policy on pilot programs.[11] This Pilot tests concepts that are not ready for full deployment and will provide empirical data to support a cost effective program in the future under the DR Programs cost/benefits test. SCE however will also attempt to quantify additonal metrics that will be identified from the Pilot (e.g., contributions to grid

[11] D.10-12-024 at p. 27 and D.15-11-042 at p. 45.

reliability, mitigation of renewables curtailment, customer costs) when assessing a future Flexible DR water sector program design.

7. Evaluation, Measurement and Verification Plan

The Pilot EM&V plan will be designed and implemented by SCE in conjunction with consultant resources familiar with water agency operations. User behavior and preferences will be collected and evaluated by SCE's Market Research team. Note that the evaluation plan tasks below may change depending on how the Pilot is rolled out.

The primary objectives of the EM&V plan include:

- Confirming successful transmission and receipt of Pilot event signals to participants.
- Validating participation of water and wastewater utilities in each load shift event called.
- Estimating the electric load that the participants shift when signaled by the Pilot.
- Assessing the types and magnitude of long-term investments the water utilities should make to participate in a future Flexible DR Program.

The EM&V plan includes the following tasks:

- Data collection and validation
    - Examine historical load profiles of the water utilities that participate in the Pilot to assess their usage prior to joining the Pilot.
    - Estimate the magnitude and timing of load shifts that occur when participating water and wastewater utilities respond to price signals during Pilot events (e.g., during over-generation). SCE expects it will use a pre-post evaluation method because the Pilot focuses on a few participants and there are unlikely to be similar non-particpating water and wastewater utilities that are directly comparable.
- Validate participation for each event.
- Gather data through in-depth interviews to find out what types of long-term investments participating utilities need to make to operationalize load shifting to times of oversupply.
- Data analysis
    - Based on validated data, complete a load impact analysis to estimate the increase in usage during Pilot events.
    - Determine if daily usage on event days increases or decreases from an estimated baseline (e.g., historical usage on similar day).
- Report and present Pilot results to Pilot stakeholders

In addition to quantifying load impacts of Pilot events, SCE will focus on evaluating the customer responses to Pilot events with a focus on:

- Establishing operational load shift strategies and expected customer system response times;
- Identifying potential risks to successful customer recruitment and program implementation;
- Identifying the costs and benefits that would provide inputs to the DR cost effectiveness template for a future program;
- Identifying any issues with expansion of the Pilot to other customer and facility types beyond the water sector;
- Identifying costs associated with compliance with CAISO tariff rules and telemetry plans prior to the Pilot rollout.

Success factors for the Pilot will be jointly developed by water sector participants, SCE, and the Pilot consultants. In-depth interviews will be conducted to obtain feedback that can be used to refine Pilot elements. Some of the topics SCE expects to explore with participants include: the process of planning infrastructure investments to allow water and wastewater utilities to take advantage of overgeneration DR events, what steps the water and wastewater utilities need to take to provide a timely response to an overgeneration DR event, and how customers viewed their performance as well as impacts to their systems.

8. Strategy to Disseminate Lessons Learned

SCE intends to disseminate its lessons learned via stakeholder discussion during the development and execution of the Pilot. The invited audience may include the water sector Pilot participants, other interested customers, water industry stakeholders and user groups, and/or support industries serving this customer sector. This discussion may take the form of virtual meetings, in-persons workshops, and/or technical whitepapers shared with stakeholders as the Pilot progresses. SCE also has data-sharing partnerships with other research organizations such as the Electric Power Research Institute, Lawrence Berkeley National Laboratories, the California Energy Commisson's EPIC program, and the UC Davis Center for Water Energy Efficiency, among others, through which similar research related to the mitigation of renewable overgeneration may be leveraged to improve the Pilot's outcomes.

TIER DESIGNATION

Pursuant to OP 51 of the Decision, this advice letter is submitted with a Tier 2 designation.

EFFECTIVE DATE

This advice letter will become effective on May 29, 2024, 30 calendar days after the date.

NOTICE

Anyone wishing to protest this advice letter may do so electronically. Protests must be received no later than 20 days after the date of this advice letter. Protests should be submitted to:

E-mail: EDTariffUnit@cpuc.ca.gov

In addition, protests and all other correspondence regarding this advice letter should also be sent electronically to the attention of:

Connor Flanigan
Managing Director, State Regulatory Operations
Southern California Edison Company
E-mail: AdviceTariffManager@sce.com

Adam Smith
Director, Regulatory Relations
c/o Karyn Gansecki
Southern California Edison Company
E-mail: Karyn.Gansecki@sce.com

There are no restrictions on who may submit a protest, but the protest shall set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice letter to the interested parties shown on the attached GO 96-B and A.22-05-002 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or at (626) 302-6838. 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.

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 Danny Waggoner at (818) 838-5513 or by electronic mail at danny.waggoner@sce.com.

Southern California Edison Company

/s/ Connor Flanigan
Connor Flanigan

CF:dw:lp