PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Agenda ID# 23419

ENERGY DIVISION **Resolution E-5188**

May 15, 2025

R E S O L U T I O N

Resolution E-5188. San Diego Gas & Electric Company Request to Reallocate Funding from the Armed Forces Pilot to the Information Technology Budget

PROPOSED OUTCOME:

- Approves the San Diego Gas & Electric Company (SDG&E) request in Advice Letter 3644-E to shift $1.0 million from the 2018 - 2022 Demand Response Budget Category 5 to Budget Category 7.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- There are no costs associated with this resolution.

By Advice Letter 3644-E, Filed on November 5, 2020.

SUMMARY

This Resolution approves San Diego Gas & Electric Company's (SDG&E) request to shift $1.0 million of unused funds from the 2018 - 2022 Demand Response (DR) Budget Category 5 (Pilots) to Budget Category 7 (Portfolio Support) for increased portfolio support costs incurred after budget approval due to changes in California Independent System Operator (CAISO) requirements and vendor licensing costs.

BACKGROUND

On December 12, 2017, the Commission issued D.17-12-003, which among other things, adopted DR activities and budgets for Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and SDG&E (collectively, the Utilities) to conduct DR programs, pilots, and associated activities for the years 2018 through 2022. D.17-12-003 also affirmed that, pursuant to D.12-04-045, the Utilities may shift up to 50 percent of the funds authorized within a category but must not shift funds between categories.

On November 26, 2019, SDG&E filed a petition for modification of D.17-12-003 (Petition) requesting the Commission revise the decision to allow requests for fund-shifting between budget categories via a Tier 3 Advice Letter (AL).

On May 12, 2020, the Commission issued D.20-05-009, which modified D.17-12-003 and granted SDG&E's request for fund-shifting between DR program budget categories by submitting a Tier 3 AL in the 2018-2022 program cycle.

SDG&E AL 3644-E, filed on November 5, 2020, requests to shift $1.0 million from DR Budget Category 5 to Category 7 to comply with CAISO's new requirements in support of SDG&E's DR portfolio and to fund contractors' increased Application Program Interface (API) licensing fees for the Air Conditioner (AC) Saver program.

	Budget Category	Approved Budget 2018-2022	Proposed Fund-Shift	Total Budget After Fund-Shift
Information Technology	7 Portfolio Support	$7,947,900	$1,000,000	$8,947,900
Armed Forces Pilot	5 Pilots	$2,507,000	($1,000,000)	$1,507,000

As a condition for shifting funds between budget categories, Ordering Paragraph (OP) 6 of D.20-05-009 requires the IOUs to submit a Tier 3 AL with responses to eight questions. Below is the list of the required questions, along with SDG&E's responses:

1) Why the amount is needed.

2) What categories are impacted (source category and recipient category).

3) Why the established rules are not adequate to accommodate the requested fund-shift at this time.

4) An accounting of the budget spent thus far on each DR program within each affected category.

5) Explanation as to why the approved budget of the source category and programs will not be needed.

6) How a budget shift will not cause a detrimental effect on any affected DR program.

7) How an increase or decrease in budget aligns with or deviates from the Commission's determination of the cost-effectiveness of the recipient and source programs.

8) An updated program cost-effectiveness analysis.

<u>1) Why the amount is needed.</u>

According to SDG&E, an additional $1.0 million is needed in the IT budget based on two drivers:

A. CAISO changed its market integration requirements in response to the recommendations that came out of the Energy Storage and Distributed Energy Resource (ESDR) Technical Working Group, convened in March 2018.

In response to recommendations from CAISO Legal and the Energy Storage and Distributed Energy Resources Working Group Phase 3a (ESDER 3a), CAISO required DR market participants to provide additional data to CAISO. These requirements are included in CAISO's Business Practice Manual for Demand Response.[1] The additional requirement having the greatest impact on SDG&E systems was that DR market participants must calculate the baseline for every hour a DR resource is bid into the market instead of only when the resource receives a CAISO award. SDG&E has implemented these changes to remain in compliance. In its AL 3644-E, SDG&E requests

[1] CAISO Business Practice Manual for Demand Response, Version 3, Appendix A: https://bpmcm.caiso.com/BPM%20Document%20Library/Demand%20Response/BPM_for_Demand_Response_V3_clean.pdf

approval to use $600,000 of the $1.0 million fund-shift to cover the system changes made in response to CAISO 's revisions to its DR participation requirements.

A. The license fees for signaling thermostats in the proposals submitted in response to the Request for Proposals (RFP) SDG&E issued in late 2018 came in higher than predicted due to significant changes in the thermostat market.

SDG&E's Technology Deployment (TD) program offered a $50 incentive to customers who enroll in an approved thermostat in an eligible DR program. When the program was active, for a thermostat to be approved for the program, the thermostat manufacturer's cloud had to be capable of responding to an Open Automated Demand Response (OpenADR) signal. In addition, the manufacturer had to have a signaling agreement in place either directly with SDG&E or through SDG&E's DR energy management system provider.

According to SDG&E, at the time AL 3644-E was submitted, in most models available, only the manufacturer had the capability to adjust the thermostat settings in customers' homes, which reduced SDG&E's leverage when negotiating thermostat license fees. Thermostat manufacturers charged an Application Programming Interface (API) fee per thermostat for their signaling services. When SDG&E developed its IT budget for its 2018-2022 application, it planned to run an RFP for a vendor with the ability to signal multiple thermostat types through one platform in 2018 and included set-up and licensing fees in the IT budget for this purpose. SDG&E sent out the RFP in late 2018 and selected a vendor in March of 2019 and completed price negotiations. However, by 2019 the thermostat market had changed, including the merger and acquisition of two major thermostat companies and the launch of one manufacturer's exclusive signaling portal, further consolidating the market and limiting SDG&E's ability to avoid paying the various required licensing fees to keep its programs open for the remainder of the 2018-2022 DR cycle. As a result of these changes and based on SDG&E's projections for program enrollments at the time, up to $400,000 in additional funding was needed in the IT budget for thermostat license fees to complete the DR program cycle.

<u>2) What categories are impacted (source category and recipient category).</u>

SDG&E is requesting approval to shift $1,000,000 from its Armed Forces Pilot budget, which is in category 5 (Pilots), to the IT budget which is part of category 7 (Portfolio Support).

3) Why the established rules are not adequate to accommodate the requested fund-shift at this time.

D.17-12-003 decreased the number of DR budget categories from ten to seven but kept the fund shifting rules as adopted in D.12-04-045 in effect. Within each of the budget categories, D.12-04-045 allows the utilities to shift up to 50 percent of a program's funds to another program, with appropriate monthly reporting. SDG&E's Category 7 Portfolio Support, includes Regulatory Policy and Program Support, IT Infrastructure and Systems Support, Evaluation Measurement & Verification, and DR potential study. Per SDG&E AL 3644-E, SDG&E did not project having sufficient funds available in its DR Budget Category 7 by the end of the 2018-2022 DR cycle to cover the potential additional $1.0 million needed for thermostat license fees and CAISO market integration requirements.

<u>4) An accounting of the budget spent thus far on each DR program within each affected category.</u>

Table 1 shows an accounting of the budget reported in SDG&E AL 3644-E for the DR programs within each affected category. In total, SDG&E underspent its IT budget for 2018 and 2019. However, at the time of submitting AL 3644-E, SDG&E did not expect the underspending to continue for two reasons. First, the IT budgets for 2021 and 2022 were lower than the 2018 IT budget. Secondly, SDG&E expected the thermostat license fees to be higher than they were in 2018 and 2019 due to the estimated increase in enrollments and pricing changes. Therefore, SDG&E projected an IT budget shortfall in 2021 and 2022 that could not be offset by the unspent 2018 and 2019 funds.

Table 1: Budget reported in SDG&E AL 3644-E for the DR programs with each affected Budget Category

SDG&E 2018-2022 Authorized	2018	2018 Actuals	2019	2019 Actuals	2020	2020 Actuals	2021	2022	Total with 10%

Demand Response Budget with 10% Reduction	Authorized Budget	YTD	Authorized Budget	YTD	Authorized Budget	YTD 1	Authorized Budget	Authorized Budget	Reduction
Category 5 – Pilots									
Armed Forces Pilot (AFP)	769,000	8,110	869,000	-	869,000	-	-	-	2,507,000
Over Generation Pilot	706,000	353,295	716,000	36,217	726,000	93,632	-	-	2,148,000
Constrained Local Capacity Planning Areas and Disadvantaged Communities Pilot	-	-	125,000	-	125,000	10,073	125,000	125,000	500,000
CBP Residential Pilot	708,000	-	-	-	-	-	-	-	708,000
Category 5 – Total	2,183,000	361,405	1,710,000	36,217	1,720,000	103,706	125,000	125,000	5,863,000
Category 7 - Portfolio Support									
Regulatory Policy & Program Support	604,400	608,292	793,800	413,911	818,000	306,401	843,300	869,400	3,928,900
IT Infrastructure & Systems Support	1,874,700	1,794,645	1,722,600	1,436,082	1,990,700	1,013,489	1,627,200	1,298,700	8,513,900
Evaluation, Measurement & Verification (EM&V)	889,200	695,980	945,500	811,909	1,103,000	400,739	1,140,300	1,123,200	5,201,200
DR Potential Study	300,000	19,580	300,000	197,529	200,000	22,346	100,000	100,000	1,000,000
Category 7 - Total	3,668,300	3,118,497	3,671,900	2,859,431	4,111,700	1,743,035	3,710,800	3,391,300	18,644,000

<u>5) Explanation as to why the approved budget of the source category and programs will not be needed.</u>

D.17-12-003 approved SDG&E's proposed Armed Forces Pilot (AFP). However, in May 2018, SDG&E received formal notification from the Navy that they would not participate in the AFP for 2018-19 or thereafter. The Navy cited two main reasons:

A. The Navy was not fully confident in the performance potential of its DR resources.
B. The Navy was not willing to participate in a pilot with penalties for nonperformance given that there may be times when their national security duties will need to take precedence over participation in DR.

In response, SDG&E proposed to end the AFP in its mid-cycle advice letter, SDG&E AL 3522-E, which was approved in Resolution E-5113. As a result, the previously approved AFP funds remained unspent.

Table 2: Impact of fund-shift on unspent AFP Budget

Unspent AFP Budget	Proposed Fund-shift to IT budget	Remaining AFP Budget
$ 2,507,293	$1,000,000	$1,507,293

<u>6) How a budget shift will not cause a detrimental effect on any affected DR program.</u>

As discussed above, the AFP's budget was ultimately not needed once the Navy pulled out of the pilot. Therefore, the fund shift would not cause a detrimental effect on the AFP, the impacted DR program.

<u>7) How an increase or decrease in budget aligns with or deviates from the Commission's determination of the cost-effectiveness of the recipient and source programs.</u>

The proposed shift of funds from the AFP budget to the IT budget will slightly lower the benefit-cost ratio of the SDG&E 2018-2022 DR portfolio. An updated cost-effectiveness analysis is presented in the response to question 8 below.

<u>8) An updated program cost-effectiveness analysis.</u>

Table 3 shows the results of the cost effectiveness analysis based on the $1,000,000 fund-shift from Armed Forces Pilot in Category 5 to Category 7 Information Technology. Table 4 compares the Total Resource Cost (TRC) test results from

SDG&E's Advice Letter 3562-E, filed on June 29, 2020,[2] with the TRC test results after the fund shift. As shown, the proposed fund shift has a negative impact on the cost effectiveness ratios.

Table 3: SDG&E Program and Portfolio Cost Effectiveness with the Proposed Fund Shift

	BIP	CBP Day Ahead (DA) 11 to 7	CBP Day Ahead (DA) 1 to 9	CBP Day Of (DO) 11 to 7	CBP Day Of (DO) 1 to 9	ACS Day Ahead (DA)	ACS Day Of (DO)	Portfolio
TRC	0.55	0.44	0.57	0.43	0.47	0.69	0.36	0.44
PAC	0.52	0.43	0.56	0.42	0.45	0.73	0.28	0.42
RIM	0.52	0.41	0.52	0.41	0.44	0.69	0.27	0.40

Table 4: Comparison of TRC Results as initially provided in SDG&E AL 3562-E and with the Proposed Fund Shift:

Program	TRC As filed in SDG&E AL 3562-E	TRC after Proposed Fund Shift
BIP	0.59	0.55
CBP DA 11 to 7	0.46	0.44
CBP DA 1 to 9	0.60	0.57
CBP DO 11 to 7	0.46	0.43
CBP DO 1 to 9	0.50	0.47
ACS DA	0.75	0.69
ACS DO	0.36	0.36
Portfolio	0.46	0.44

NOTICE

Notice of AL 3644-E was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

[2] Pursuant to D. 17-12-003, OP 53, SDG&E submitted this Tier 1 AL to provide an update on the costs and cost effectiveness of SDG&E's DR programs administered in the previous program year.

PROTESTS

Advice Letter 3644-E was not protested.

DISCUSSION

The Commission has reviewed SDG&E AL 3644-E and find it complies with D. 20-05-009, which allows SDG&E to request fund shifting between its 2018-2022 DR budget categories by providing responses to a set of questions presented in the decision via a Tier 3 AL.

We find SDG&E's assertion regarding unforeseen cost increases due to SDG&E's need to update its systems to comply with revisions to the CAISO Business Practice Manual for Demand Response reasonable. The Commission granted a similar request by PG&E in Resolution E-5181 in May 2022.

In addition, we note SDG&E's accounting for higher-than-expected licensing fee budget. A less competitive communicating-thermostat market through consolidations and manufacturers' exclusive signaling portals could reasonably lead to increased prices for thermostat control systems licenses. As SDG&E explained in SDG&E AL 3644-E, thermostat manufacturers use proprietary signaling software allowing only the specific manufacturer and customer to adjust the thermostat. SDG&E or its signaling platform vendor must use paid APIs to go through manufacturers to communicate with the thermostats.

In assessing potential negative impacts to the program because of the proposed fund shift, we do not expect any detrimental impacts given the AFP program was never fully launched. We also consider the remaining program budget of $1,507,293 to have been sufficient to close out the program. As a result, implementation of AFP will not be detrimentally impacted by this fund-shift request. In addition, any unspent AFP funds recorded in SDG&E's Advanced Metering and Demand Response Memorandum Account (AMDRMA) will not be collected from ratepayers.

Based on SDG&E's responses in AL 3644-E to the questions in D.20-05-009, we accept as reasonable SDG&E's explanation of why the requested fund shift is necessary.

SDG&E's cost effectiveness analysis presented in its AL 3644-E shows a negative impact from the requested budget shift. D.17-12-003 adopted a cost effectiveness requirement of TRC 1.0 for SDG&E's 2018-2022 DR programs.[3] However, SDG&E's fund shift request is not a result of inherent program design issues but of unforeseen circumstances as detailed in SDG&E's AL 3644-E and discussed in this Resolution. For the above reasons we approve SDG&E's request to shift $1.0 million from Budget Category 5 to Budget Category 7.

COMMENTS

All parties in the proceeding have stipulated to reduce the 30-day waiting period required by PU Code section 31l(g)(1) to three days. Accordingly, this matter will be placed on the first Commission's agenda three days following the mailing of this draft resolution. By stipulation of all parties, comments shall be filed no later than three days following the mailing of this draft resolution.

FINDINGS AND CONCLUSIONS

1. Commission Decisions D.17-12-003 and D.20-05-009 directed SDG&E to file a Tier 3 Advice Letter to request 2018 - 2022 DR budget category fund shifting.
2. SDG&E complied with the requirement to provide responses to eight questions justifying the fund shifting request.
3. CAISO required the Utilities to provide hourly baselines for integration of distributed battery resources under ESDR, increasing IT costs.
4. Due to communicating thermostat market changes and consolidations, SDG&E could not secure one vendor providing the advantage of scale services on one platform instead of paying the proprietary API licensing fees of many thermostat vendors who only have access to their thermostats.
5. The Navy cancelled the AFP under SDG&E DR Category 5 (Pilots), leaving a $1 Million budget available for fund-shifting.
6. SDG&E presented the DR budget status in the details required by D.17-12-003, as amended by D.20-05-009.
7. SDG&E identified the Categories impacted by the fund-shift as donor Category 5 (Pilots) and recipient Category 7 (Portfolio Support) as required by D.17-12-003, as amended by D.20-05-009.

[3] D.17-12-003 at 121.

8. The AFP was cancelled after approval of the 2018 - 2022 DR budget approval thus making the reasons for shifting some of its budgeted funds to new portfolio support requirements reasonable.
9. Based on past Commission decisions that approved SDG&E's 2018-2022 DR program despite low cost-effectiveness scores, it is reasonable to approve SDG&E's requested fund-shift in its AL 3644-E.

THEREFORE IT IS ORDERED THAT:

1. San Diego Gas and Electric Company's request in to shift $1.0 Million from the 2018 - 2022 demand response budget Category 5 (Pilots) to Category 7 (Portfolio Support) is approved.

This Resolution is effective today.

Commissioner Signature blocks to be added upon adoption of the resolution

The foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 15, 2025; the following Commissioners voting favorably thereon:

Dated May 15, 2025, at <Voting meeting location>, California