Date of Issuance: August 5, 2022

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION **RESOLUTION E-5113**
August 4, 2022

R E S O L U T I O N

Resolution E-5113. San Diego Gas & Electric Company's Mid-Cycle Review Compliance Submittal for its 2018-2022 Demand Response funding Application pursuant to Decision 16-09-056.

PROPOSED OUTCOME:

- Approves SDG&E's request to close the Armed Forces Pilot (AFP).
- Approves SDG&E's request to close the Over-generation Pilot.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- There are no costs associated with this resolution.

By Advice Letter 3522-E, Filed on March 27, 2020

SUMMARY

This Resolution addresses various proposals in San Diego Gas & Electric Company's (SDG&E's) Advice Letter (AL) 3522-E, Mid-Cycle Review Compliance Submittal for its 2018-2022 Demand Response (DR) funding Application pursuant to Decision (D.) 17-12-003.

The Mid-Cycle Review (MCR) is required by D.16-09-056, which increased the DR budget cycle from three to five years. The MCR provides a full status report of each demand response program, and may recommend minor, non-controversial program changes.

This Resolution reviews SDG&E's proposed updates to its current DR programs and protests filed by stakeholders and approves those changes. Many of the proposed changes have already been approved by the CPUC in R.20-11-003. In addition, this Resolution finds that the changes requested in the protests are inappropriate for the AL process or out of scope of the MCR.

This Resolution approves SDG&E's requests to discontinue its Armed Forces Pilot (AFP) and Over-Generation Pilot.

BACKGROUND

On September 29, 2016, the CPUC issued D.16-09-056, which provided guidance to the Investor-Owned Utilities (IOU) for filing their 2018-2022 DR applications, established a DR budget cycle length of five years, and stipulated a mid-cycle review (MCR) in 2020. In response, SDG&E filed its 2018-2022 DR Application (A.) 17-01-019 on January 17, 2017. SDG&E's Application was approved as part of D.17-12-003.

D.16-09-056 Ordering Paragraph (OP) 9 ordered SDG&E to submit a Tier 3 Advice Letter no later than April 1, 2020, with a mid-cycle review, including proposed modifications to its DR programs.

As part of the MCR process, SDG&E presented a list of directives jointly developed with the other utilities and met with ED to ensure proper scoping of the instant MCR AL.

SDG&E filed AL 3522-E on March 27, 2020. SDG&E proposes the following modifications to its existing demand response programs:

- *Proposed Modification 1:* SDG&E proposes three changes to its Capacity Bidding Program.

  First, to modify its price triggers for CBP, as follows:
  - Day-Ahead 11am – 7pm from $80/MWh to $90/MWh.
  - Day-Ahead 1pm – 9pm from $80/MWh to $90/MWh.
  - Day-Of 11am – 7pm from $95/MWh to $115/MWh.
  - Day-Of 1pm – 9pm from $110/MWh to $125/MWh.

Second, to update its notification times, as follows:

- CBP Day-Ahead: in order to align with the other IOUs, change the notification time to 5pm the day before the event.
- CBP Day-Of: in order to bid CBP Day-Of into the CAISO Real-Time market, change the notification time to 40 minutes prior to the start of the event.

Third, to open a new Residential CBP Pilot.

- *Proposed Modification 2:* SDG&E proposes to update the Base Interruptible Program (BIP) measuring hours for customers' "Monthly Average Peak Demand" from 1pm – 6pm to 4pm – 9pm in order to realign its incentive payments with the "Availability Assessment Hours" (AAH).

- *Proposed Modification 3:* SDG&E proposes to open the Air Conditioning (AC) Saver program to NEM customers.

- *Proposed Modification 4:* SDG&E proposes to close the Armed Forces Pilot.

- *Proposed Modification 5:* SDG&E proposes to close the Over-Generation Pilot.

- *Proposed Modification 6:* SDG&E proposes to implement the Day Matching baseline methodology at the aggregate level for its Residential CBP Pilot.

NOTICE

Notice of AL 3522-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.

PROTESTS

SDG&E's Advice Letter 3522-E was timely protested within the ED-approved extension of May 5, 2020, by the Joint Parties, comprising the California Efficiency + Demand Management Council, CPower, EnelX North America, Inc., and OhmConnect, Inc. The Public Advocates Office of the California Public Utilities Commission (Cal Advocates) also filed a protest on May 5, 2020. SDG&E replied to the protests of the Joint Parties and the Cal Advocates within the ED-approved extension period, on May 19, 2020.

Joint Parties' Protest

The Joint Parties made several proposals related to the Capacity Bidding Program and Base Interruptible Program:

In response to the three changes in SDG&E's CBP, the Joint Parties propose that SDG&E adopt a CBP Elect option that allows participants to make hourly bids. In addition, the Joint Parties argues that SDG&E should remove DRAM-related Eligibility Requirements and transition the residential CBP Pilot directly to a full program. The Joint Parties states that if this is not possible, SDG&E should at the very least extend its residential CBP pilot through 2022.

The Joint Parties believe that SDG&E should revise their CBP and BIP tariffs to exclude Power Safety Power Shutoff (PSPS) events when calculating performance during a DR event.

The Joint Parties recommend that the Commission direct SDG&E to assess the accuracy of using a 5-in-10 baseline with a 40% adjustment cap for non-residential CBP customers. The Joint Parties believe that if this assessment proves that the 5-in-10 baseline is viable for non-residential customers, this information could be shared with the California Independent System Operator (CAISO). CAISO could potentially support adding a non-residential 5-in-10 baseline to its tariff for an option for Proxy Demand Resources (PDRs).

The Joint Parties state that more than two years have passed since D.17-12-003 ruled on various issues intending to level the competitive playing field between IOUs and third-parties, but there are still issues with the process by which customers of third-parties apply for an incentive in the technology incentive program. Therefore, the Joint Parties recommends that the Commission should develop more specific improvements through a workshop process.

In addition, the Joint Parties address the disparity in awareness among customers between IOU and third-party DR options available to them. The Joint Parties suggest that the Commission direct the IOUs to disclose, at least twice per year, key metrics on the page views to address the disparity in awareness among customers between IOU and third-party DR options.

The Joint Parties state that there are very high cancellation rates of enabling technology incentive applications, especially for residential customers. Thus, the Joint Parties recommend that SDG&E should "allow customers to sign over their incentive payments to DR Aggregators. . ."[1] The Joint Parties propose that this approach would "allow DR aggregator to 'front' the incentive payment for their customers while eliminating a significant administrative burden on the customer applying for the incentive."[2]

The Joint Parties propose that "[t]he IOUs should develop pilots to test the type of DR products envisioned by the . . . 2025 California Demand Response Potential . . . Study."[3] The Joint Parties argue that SDG&E "should use the next two years to develop a pilot to shift, shimmy, and shape products using their respective over-generation/excess supply pilot funding."[4]

Cal Advocates' Protest

Cal Advocates proposes that the Commission use the 2020 DR Mid-Cycle review as an opportunity to redirect overbudgeted program monies, to more effectively mitigate ratepayer hardship in the short and long term. Cal Advocates recommends that the Commission reduce SDG&E's budget for 2020 and 2021 to the 2019 actual spending level. They state that future spending on DR programs will be less than actual spending in 2019 due primarily to the recessed economy.

They assert that reducing the 2020 budget from the currently authorized $17M to the 2019 actual spending of $7.5M would leave roughly $9.5M available for assisting vulnerable customers through reduced collections. Cal Advocates also recommends that the Commission order SDG&E to file a supplemental AL to reduce its 2020 and 2021 DR budgets to match actual 2019 spending.[5]

SDG&E's Response to Parties' Protests

In its response to the Joint Parties' assertion that there is significant customer interest in a CBP Elect product, as offered by PG&E, SDG&E replies that they currently do not

[1] Joint Parties' Protest, p. 4.
[2] Joint Parties' Protest, p. 4.
[3] Joint Parties' Protest, p. 4.
[4] Joint Parties' Protest, p. 4.
[5] Cal Advocates Protest, p. 1-3.

have any data to support the Joint Parties' claim that there is similar customer interest to having a CBP Elect product in its territory as in PG&E's.

SDG&E states that it chose to file only *necessary* changes to CBP in its Mid-Cycle Review and "did not believe cleanup items to be considered necessary at this time."[6] SDG&E reiterates that D.17-12-003 orders it to propose a one-year residential CBP Pilot. Lastly, SDG&E believes it is premature to transition into a full program or extend into 2022 until it receives participation data from customers and aggregators.

In response to the Joint Parties' recommendation to exclude PSPS events from baseline calculations, SDG&E agrees that it would be reasonable to exclude PSPS from baseline calculations for CBP and incentive calculations for BIP. However, SDG&E respond that it cannot do this because its systems are not currently programmed to omit PSPS events from these calculations. SDG&E does not believe that the benefits of excluding PSPS would outweigh the costs of implementing system changes.

In response to the Joint Parties' assertation that the CPUC should direct the IOUs to assess the accuracy of a non-residential 5-in-10 baseline with a 40% adjustment cap, SDG&E states that "[t]he protest is misplaced as 5-in-10 for non-residential customers is beyond the scope of the filing. The CPUC instructed (in D.19-07-009 at OP 18) the IOUs to analyze the 5-in-10 for residential customers, not both residential and non-residential customers."[7]

In its response to the Joint Parties, SDG&E does not oppose a workshop to discuss SDG&E's enrollment process. However, SDG&E disagrees with the Joint Parties' request that the utilities provide website statistics, stating that this is not in the scope of the Mid Cycle Review Process. SDG&E notes that this request should be considered as part of the 2023-2027 DR Budget Application.

In its response to the Joint Parties comments on aggregator eligibility for technology incentives, SDG&E states "[a]ll of these 'canceled' applications were canceled by SDG&E because the customer was ineligible. Customers did not cancel their own applications due to difficulties with the application process."[8] In addition, SDG&E asserts that it does provide incentives to customers in an eligible third-party program,

[6] SDG&E Reply to Joint Parties, p. 4.
[7] SDG&E's Reply to Joint Parties, p. 2.
[8] SDG&E Reply to Joint Parties' Protest, p. 3.

stating "SDG&E sends a customized welcome e-mail to customers of third-parties explaining that they will receive a $50 incentive."

In response to the Joint Parties recommendation to develop pilots to test the type of DR products envisioned by the 2025 California Demand Response Potential Study, "SDG&E agrees new pilots should be tested." However, SDG&E also states that pilot testing is "out of scope for the mid-cycle review and would require a Commission decision and additional funding."[9]

In response to Cal Advocates' request to decrease SDG&E's budget, SDG&E states that "SDG&E costs are 1) not recovered unless they were actually spent (as opposed to budget or a plan to spend); and 2) are recovered from customers the following year after they are spent."[10] SDG&E further states that the funds it "seeks and gets authorization to spend are adequate for the maximum number of DR events being called while ensuring that only what is spent ever gets collected in rates. The unspent budget is never collected, and thus, ratepayers are protected. . . With this process, SDG&E never has to return to the Commission to seek additional funds, nor does it collect unnecessarily or retain collected funds that were never spent for authorized DR activity."[11]

DISCUSSION

The CPUC has reviewed the Advice Letter, the protests, and replies, and finds the following:

SDG&E's Proposals:

Proposed Modification 1:
We decline to approve SDG&E's CBP price trigger proposal as requested in the AL:

- Day-Ahead 11am – 7pm from $80/MWh to $90/MWh.
- Day-Ahead 1pm – 9pm from $80/MWh to $90/MWh.
- Day-Of 11am – 7pm from $95/MWh to $115/MWh.
- Day-Of 1pm – 9pm from $110/MWh to $125/MWh.

[9] SDG&E Reply to Joint Parties' Protest, p. 3.
[10] SDG&E Reply to Cal Advocates' Protest, p. 1.
[11] SDG&E Reply to Cal Advocates' Protest, p. 2.

SDG&E provided a historical analysis of the CBP program, with the goal of determining the maximum number of CBP events that can be called without losing CBP customers. SDG&E performed significant analysis using data for the years 2012 to 2019, examining different price triggers and the number of events that would have been called by the CAISO at each given price point. SDG&E's analysis concluded that under the current price triggers, CBP events were called for the maximum number of events (6) in several months, often times on consecutive months. According to SDG&E this has resulted in loss of participants due to fatigue.

With its proposed price triggers, the number of months when the maximum number of events is reached would be much less in comparison to the current price triggers. SDG&E concludes that customer fatigue would be reduced, and new customers could be attracted to CBP if the price triggers were increased. This would reduce the number of months where the maximum of six events is reached.

Increasing customer enrollment in demand response programs, as well as stemming the loss of current participating customers, is critically important to ensuring grid reliability. The CPUC recently concluded its Summer Reliability rulemaking (R.20-11-003) with numerous changes to existing demand response programs in an effort to expand these programs in preparation for extreme weather in the summers of 2022 and 2023.[12] One specific change relevant to the discussion here is the approval of the CBP Elect program authorized in D.21-12-015. This new version of CBP has price triggers of $200 MWh, $400 MWh, and $600 MWh (for both Day-Ahead and Day-Of notification), which are much higher than SDG&E's proposed price triggers for the standard CBP. The monthly capacity payments for CBP Elect are equal to or even greater than the monthly capacity payments for the standard CBP. It is reasonable to expect that current and potentially new customers will prefer CBP Elect over the standard CBP, and SDG&E has confirmed that likelihood.[13]

It is also worth noting here that the operational hours of the CBP Elect are from 1-9 pm, which overlap with CAISO's net peak hours of 4-9 pm, the critical time of day when load reductions are needed. In contrast, the standard CBP program offers an 11 am – 7 pm operational window, and notably SDG&E does not propose to change those hours to better align with the 4-9 pm net peak period.

[12] D.21-12-015

[13] In response to an Energy Division data request on February 1, 2022, SDG&E states that most of its CBP customer aggregators will transition their customers over to CBP Elect for 2022 and 2023.

Given the emergence of the CBP Elect program and its anticipated appeal to aggregators, we do not see a need to increase the price triggers for the standard CBP. Customers may have been fatigued by the number of events triggered by lower price triggers, but that issue now seems to have been addressed by offering CBP Elect which has higher price triggers. Additionally, increasing the triggers for the purpose of attracting or retaining customers to the standard CBP program which has operational hours that do not cover the net peak period of 4-9 pm runs counter to the objectives of the Summer Reliability proceeding which was specifically focused on addressing reliability during the net peak hours. For all these reasons, we decline to approve the higher price triggers for the standard CBP program.

In Proposed Modification 1, SDG&E also requests to adjust CBP's notification time for Day-Ahead to "no later than 5pm on day prior to the Event day," for Day-Of to "Not later than 40 minutes prior to the start of the Event," and to implement a one-year residential pilot per D.17-12-003 OP 22. The CPUC approved the items in Proposed Modification 1 in D.21-03-056 and this Resolution concurs with that determination.

Proposed Modification 2:
SDG&E proposes to update the Base Interruptible Program (BIP) measuring hours for customers' "Monthly Average Peak Demand" from 1pm – 6pm to 4pm – 9pm to realign its incentive payments with the "Availability Assessment Hours" (AAH). The CPUC approved SDG&E's request to update measuring hours for BIP incentive calculation in D.21-03-056 and this Resolution concurs with that determination.

Proposed Modification 3:
SDG&E proposes to open the Air Conditioning (AC) Saver program to NEM customers. The CPUC approved this proposal in D.21-03-056 and this Resolution concurs with that determination.

Proposed Modification 4:
We approve SDG&E's request to close its Armed Forces Pilot (AFP). As stated by SDG&E, the AFP has not been successful. On August 9th, 2018, during a program event, the Navy actually *increased* its load instead of reducing it. The Navy concluded that it would be unlikely that it would be able to respond to day-of DR events. As a result, the Navy has decided to not participate in any programs that have penalties for non-performance.

Nevertheless, according to SDG&E, the Navy is interested in DR and has a goal of implementing microgrid technology and automated controls. For now, SDG&E requests to close the AFP and find new ways for the Navy to participate in DR without penalties for non-performance. We applaud SDG&E's willingness to test alternative approaches that may potentially offer the Navy a way to participate in DR. We agree with SDG&E that it should discontinue the AFP.

Proposed Modification 5:
The Over-Generation Pilot proposed to use battery storage at commercial sites to help reduce the excess generation of solar energy exported to the grid during the day. In 2017, various issues began to arise such as possible liability and permitting concerns, property access rights, battery warranties, and battery ownership. During the past three years, these challenges have led to cost overruns and project delays. We agree with SDG&E that due to these obstacles SDG&E should close the Over-Generation Pilot.

Proposed Modification 6:
In response to D.19-07-009 OP18, SDG&E proposes to implement the Day Matching baseline methodology at the aggregate level for its Residential CBP Pilot. SDG&E performed extensive analysis to determine the accuracy and precision of the aggregate level vs. the individual baseline level for day matching. The results showed that the day matching aggregate level outperforms the individual level for day matching, and that both precision and bias are significantly improved using the aggregated baseline. D.21-03-056 authorized SDG&E to start this pilot in 2021 and D.21-12-015 recently authorized SDG&E to continue this pilot in 2022. In approving the pilot, the CPUC also approved the day matching baseline methodology at the aggregate level.

Joint Parties' Proposals:
While SDG&E's response to Joint Parties asserts that there is no data to support a CBP Elect product, SDG&E has since modified its position and proposed this product in Phase 2 of R.20-11-003. As noted earlier in this resolution, D.21-12-015 subsequently approved the CBP Elect product for SDG&E starting in 2022 and into 2023.

The Joint Parties' recommendation that PSPS events be factored into BIP and CBP baselines is a technical change to the design of the program but is relatively straightforward. However, SDG&E states that it would be difficult and costly to make this change. SDG&E recently filed its 2023-27 demand response portfolio application that in May 2022. (A.22-05-003) We will defer to that proceeding for consideration of this issue.

As noted previously, for SDG&E's CBP Residential Pilot, D.21-03-056 authorized SDG&E to start this pilot in 2021 and D.21-12-015 recently authorized SDG&E to continue this pilot in 2022. In its 2023-27 demand response portfolio application, SDG&E is seeking to continue this pilot in 2023 and possibly transition into a standard product offering beyond 2023 depending on a measurement and evaluation review.[14]

We agree with SDG&E that the Joint Parties request that the utilities provide website statistics is not in scope for the MCR.

We also agree with SDG&E that it is beyond the scope of this resolution to order utilities to use pilots to test DR products envisioned by the 2025 California Demand Response Potential Study and that this requirement would require a CPUC decision and additional funding.

In response to the Joint Parties' assertation that the CPUC should direct the IOUs to assess the accuracy of a non-residential 5-in-10 baseline with a 40% adjustment cap, we find that this is out of scope of the MCR process, per Conclusion of Law 74 of D.17-12-003 which states "alternative baselines should not be addressed in the mid-cycle review."

We disagree with the Joint Parties' assertion that AutoDR cancellation rates would decrease if SDG&E allowed customers to sign over their incentive payments to DR aggregators, given SDG&E's statement that most of the cancellations were made because of customer ineligibility. In addition, D.18-11-029, OP 6(g), states that "[o]nly the customer is eligible for the Auto Demand Response control incentive, not the aggregator, demand response provider, or manufacturer cloud portion of the control."

Cal Advocates' Proposal:

We take up here Cal Advocates' proposals and recommendations that have not already been addressed.

We reject Cal Advocates' recommendation that SDG&E's budget should be decreased because 1) SDG&E's costs are not recovered unless they are actually spent, and 2) SDG&E's costs are recovered from customers the following year after they are spent. Therefore, the unspent budget is never collected, and ratepayers are protected.

[14] SDG&E testimony Exhibit 1-A (E. Bradford Mantz) and Exhibit 1-B (E. Bradford Mantz).

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review. Please note that comments are due 20 days from the mailing date of this resolution. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding. The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on June 30, 2022.

No comments on this resolution were received.

FINDINGS

1. Decision D.16-09-056 directed SDG&E to file a Mid-Cycle review Tier 3 advice letter no later than April 1, 2020, providing an update on each of its demand response programs and requesting approval of any necessary changes.
2. SDG&E filed AL 3522-E timely on March 27, 2020. Protests were filed timely with SDG&E replying to each.
3. The emergence of the CBP Elect program and its anticipated appeal to aggregators, precludes the need to increase the price triggers for the standard CBP.
   The standard CBP offers operational hours that are not aligned with the net peak hours of 4-9 pm.
4. SDG&E’s proposed modification to adjust CBP’s notification times were approved in D.21-03-056.
5. SDG&E's proposal to implement a one-year residential CBP pilot was approved in D.21-03-056.
6. SDG&E proposed modification to update BIP measuring hours for customers’ Monthly Average Peak Demand was approved in D.21-03-056.
7. SDG&E proposed modification to open the AC Saver program to NEM customers was approved in D.21-03-056.
8. SDG&E’s Armed Forces pilot program has been unsuccessful and should be discontinued.
9. SDG&E’s Over-Generation Pilot has been delayed by many unforeseen barriers and should be discontinued.
10. SDG&E’s proposed Day Matching baseline methodology at the aggregate level for its Residential CBP Pilot was approved in D.21-03-056.
11. The CPUC approved a CBP Elect option for SDG&E in D.21-12-015.

12. PSPS events are beyond the control of the participant or the aggregator
13. Factoring PSPS events into BIP and CBP baselines is a relatively straightforward technical change to the design of the program.
14. D.21-12-015 authorized SDG&E's Residential CBP pilot to continue in 2022.
15. Utility provision of demand response website statistics is out of scope of the MCR process.
16. Development of DR pilot programs of products envisioned by the 2025 California Demand Response Potential Study pilots is out of scope of the MCR process.
17. D.17-12-003 states that "alternative baselines should not be addressed in the mid-cycle review."
18. Evaluating the 5-in-10 baseline for non-residential customers is out of scope for this MCR process.
19. Most canceled AutoDR applications were due to customer ineligibility, not due to the effort required on the part of the customer to apply for SDG&E's incentive payment.
20. Allowing customers to sign over their incentive payments to DR aggregators is unlikely to decrease AutoDR cancellation rates.
21. D.18-11-029 states that "[o]nly the customer is eligible for the Auto Demand Response control incentive, not the aggregator, demand response provider, or manufacturer cloud portion of the control."
22. Reducing SDG&E's demand response budget would not protect customers because SDG&E's unspent budget is never recovered from customers.

THEREFORE IT IS ORDERED THAT:

1. The request of San Diego Gas & Electric Company to modify certain DR programs as requested in Advice Letter 3522-E is approved with the modifications discussed in this resolution.

2. SDG&E's request to modify the price triggers for its standard CBP program is rejected.

3. SDG&E shall close its Armed Forces Pilot.

4. SDG&E shall close its Over-Generation Pilot.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on August 4, 2022, the following Commissioners voting favorably thereon:

/s/ RACHEL PETERSON
Rachel Peterson
Executive Director

ALICE REYNOLDS
President

CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
DARCIE HOUCK
JOHN REYNOLDS
Commissioners