

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

ENERGY DIVISION

RESOLUTION E-4934

September 13, 2018

**R E S O L U T I O N**

Resolution E-4934. Approves San Diego Gas & Electric Company's Advice Letter on Demonstration Project C Request for Offers Bidding Results Pursuant to Decision 17-02-007 and 17-06-012.

PROPOSED OUTCOME:

- Approves San Diego Gas & Electric Company's request to conclude the Distribution Resources Plan Demonstration Project C Request for Offers without executing any contracts.
- Approves San Diego Gas & Electric Company's request to conclude part of its Demonstration Project C.

SAFETY CONSIDERATIONS:

- There are no safety considerations.

ESTIMATED COST:

- San Diego Gas & Electric Company has stated its intent to proceed with a traditional distribution infrastructure solution. These costs will be included in San Diego Gas & Electric Company's General Rate Case.

By Advice Letter 3187-E, Filed on February 16, 2018.

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## **SUMMARY**

On February 16, 2018, San Diego Gas & Electric Company (“SDG&E”) filed Advice Letter (“AL”) 3187-E to report on the solicitation results from its Distribution Resources Plan (“DRP”) Demonstration Project C (“Demo C”) Request for Offers (“RFO”). This Resolution approves SDG&E’s request not to execute contracts. This Resolution also requires SDG&E to discuss its “immediate dispatch” requirement, which is included in its RFO, in the Distribution Investment Deferral Framework (“DIDF”) in order to assess the requirements’ need in future solicitations and discuss if it is a barrier to the deployment of Distributed Energy Resources (“DERs”). Additionally, this Resolution orders SDG&E to share its RFOs for future solicitations vetted through DIDF with Energy Division prior to launch.

## **BACKGROUND**

On August 14, 2014, the California Public Utilities Commission (“Commission”) issued Rulemaking (“R.”) 14-08-013 to establish policies, procedures, and rules to guide California investor-owned electric utilities (“IOUs”) in developing their DRPs, which were required by Public Utilities Code (“P.U. Code”) section 769. On February 6, 2015, the Commission issued the *Assigned Commissioner’s Ruling on Guidance for Public Utilities Code Section 769 – Distribution Resource Planning*, which set out final guidance for the content and structure of the DRPs. Among the requirements, the utilities were required to propose DER-focused demonstration and deployment projects.

On February 16, 2017, and June 19, 2017, the Commission issued Decisions (“D.”) 17-02-007 and D.17-06-012, respectively, which approved DRP Demonstration Projects proposed by SDG&E in Application (“A.”) 15-07-003, filed on July 1, 2015, and which were updated on June 16, 2016,<sup>1</sup> and March 13, 2017.<sup>2</sup> The

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<sup>1</sup> See *Responses to Track 2 Demonstration Projects Questions of San Diego Gas & Electric Company (U 902-E)* filed on June 16, 2016 in R. 14-08-013.

Commission approved SDG&E's Demo C, which is intended to validate the use of DERs to defer or avoid investments in traditional distribution infrastructure and achieve net ratepayer benefits as estimated by the Locational Net Benefits Analysis ("LNBA").<sup>3</sup>

SDG&E originally proposed to use two circuits for its Demo C: Circuit 701 connected to Mission Substation and Circuit 470 connected to Felicita Substation. In D.17-02-007, the Commission approved Circuit 701 but did not approve Circuit 470, because, in its comments on the proposed decision, SDG&E stated that due to a change in forecasted thermal overload, Circuit 470 no longer fit the criteria for Demo C.<sup>4</sup> Based on updated thermal overload forecasts, SDG&E proposed to use Circuits 295, 298, and 597 fed from San Marcos Substation. However, SDG&E did not provide adequate on-the-record information to approve the use of the new circuits. Therefore, SDG&E was ordered to file and serve comments requesting approval for the new locations for Demo C. SDG&E filed such comments on March 13, 2017. D.17-06-012 approved Circuits 295, 298, and 597 for Demo C on June 19, 2017.

The objective for using Circuit 701 for Demo C is that it will evaluate the ability of grid services provided by DERs to modulate voltage levels through the use of smart inverters. For this circuit, there was no need for additional DER procurement. SDG&E filed its first progress report for this circuit on November 17, 2017, and its second progress report on June 22, 2018.

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<sup>2</sup> See *Comments Requesting Approval of New Demonstration Project C by San Diego Gas & Electric Company (U 902-E)* filed on March 13, 2017 in R.14-08-013.

<sup>3</sup> The Distribution Resources Plan proceeding is currently overseeing development of a new analytical tool called the Locational Net Benefits Analysis that would calculate the value of DERs at every location on the distribution system, based on the types of utility spending DERs are able to defer or avoid, netted by the costs required to accommodate those DERs.

<sup>4</sup> *Track 2 Demonstration Project Proposed Decision Comments of San Diego Gas & Electric Company (U 902-E)*, at 5

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The objective for using Circuits 295, 298, and 597 was to address forecasted thermal overloading conditions on these circuits, and evaluate the ability of DERs to provide capacity services that allow a distribution capacity project to be deferred. DER procurement was deemed necessary for these circuits by mid-2018 to defer traditional projects. The scope of the traditional projects to be deferred were circuit cutovers, i.e., transfer load from one circuit to another, to provide an interim solution to prevent any of the circuit's thermal capacity from being exceeded.<sup>5</sup> Additionally, because these load transfers were only an interim solution, the traditional solution included additional work being performed in 2020, which consisted of a new circuit being constructed ("2020 Build-out Project") from the San Marcos substation to offload existing highly loaded circuits in the area.<sup>6</sup>

**Advice Letter 3187-E**

SDG&E submitted AL 3187-E on February 16, 2018. The AL included attachments: a) DRP Demonstration Project C RFO Code of Conduct, b) Public Independent Evaluator's ("IE") Report ("Public IE Report") by Sedway Consulting, Inc., and a Confidential Appendix A ("Confidential IE Report"), and c) SDG&E's 2017 Distribution Resources Plan Demonstration Project C RFO Guidelines ("RFO Protocol").

On October 18, 2017, SDG&E issued its 2017 DRP Demo C RFO to solicit offers for DERs that would allow it to defer distribution capacity projects that otherwise would have to be completed to maintain system safety and reliability (i.e., distribution upgrades or expansion).

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<sup>5</sup> *Comments Requesting Approval of New Demonstration Project C by San Diego Gas & Electric Company (U 902-E)*, p.4

<sup>6</sup> *Comments Requesting Approval of New Demonstration Project C by San Diego Gas & Electric Company (U 902-E)*, p.5

On November 16, 2017, SDG&E and the IE received offers from 14 unique projects. The offers received were:

- 3 Behind-the-Meter Solar plus Energy Storage,
- 10 In-Front-of-the-Meter Energy Storage, and
- 1 Natural Gas Distributed Generation Resource.

SDG&E performed a quantitative and qualitative analysis on the offers and evaluated them all, regardless of resource or technology type, on an identical basis relative to the proprietary distribution deferral cost effectiveness cap.<sup>7</sup> On December 15, 2017, SDG&E held its Cost Allocation Mechanism (“CAM”) Procurement Review Group (“PRG”) meeting to discuss the RFO results. SDG&E states that it did not receive any conforming bids that were cost-effective, so no offers were shortlisted.

The IE performed a parallel evaluation of the offers and participated in discussions with SDG&E and with the CAM PRG participants. The Public IE Report concludes that SDG&E conducted a fair and effective solicitation and that all offers were evaluated consistently, appropriately, and without bias.

Additionally, the IE participated in discussions the Commission’s Energy Division had with SDG&E regarding the results of the Demo C RFO to explore ways to salvage the DRP Demo C. SDG&E included an “immediate dispatch” requirement in its RFO. Energy Division requested that a follow-up RFO ask bidders to offer pricing with and without the emergency dispatch provision to test how this requirement affected bid pricing. Due to timing to meet the June 1, 2018 delivery start date, SDG&E moved forward with its Advice Letter filing.

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<sup>7</sup> The confidential “soft cap” was recommended by ORA. It is based on the traditional “wires” solution deferral value. The utilities were allowed to file a Tier 3 advice letter to increase the cost cap should procurement costs be higher than expected.

SDG&E submitted the Tier 3 AL in compliance with Ordering Paragraph 26 in D.17-02-007 to inform the Commission that SDG&E did not enter into any contracts and “therefore must proceed with traditional distribution solutions to ensure safety and reliability for customers.”<sup>8</sup>

### **NOTICE**

Notice of AL 3187-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 AL 3187-E was not protested.

### **DISCUSSION**

#### **SDG&E’S DEMONSTRATION PROJECT C IS CONCLUDED FOR CIRCUITS 295, 298, AND 597**

The Commission has reviewed SDG&E’s AL and the attached public and confidential IE reports and RFO Protocol. SDG&E sought deferral opportunities for its Demo C. SDG&E received a variety of bids through its RFO for the Circuit 295, 298, and 597 portion of its Demo C, but none of the bids were cost-effective. In light of the lack of cost-effective DER solutions, the Commission agrees with SDG&E’s decision to not execute any contracts. With regards to the 2020 Build-out Project, SDG&E has informed Energy Division that there is no longer a need for it at this time because the increase in load is no longer expected;<sup>9</sup> therefore, a new RFO to salvage that part of Demo C is not required. This terminates the portion of SDG&E’s DRP Demo C to evaluate the ability of DERs to provide

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<sup>8</sup> *Advice Letter 3187-E, San Diego Gas & Electric’s Demonstration Project C Request for Offer (RFO) Bidding Results Pursuant to Decision 17-02-007 and D.17-06-012, (A.L. 3187-E) p. 3*

<sup>9</sup> Energy Division Data Request. May 25, 2018.

capacity services that allow a distribution capacity project to be deferred. No further action is required except as stated below.

Because this solicitation does not affect the objective for using Circuit 701 for Demo C, SDG&E will continue its reports to the Commission on Circuit 701 as required by D.17-02-007 and D.17-06-012.

**SDG&E's FAILURE TO DISCLOSE DER OPERATIONAL REQUIREMENTS IN DRP DEMOC C APPLICATION AND PROCEEDING**

The DRP Demo C RFO contained a requirement that:

SDG&E also requires that at any time of year the maximum MW amount shown for each year...be available once per year for two hours to support both planned and unplanned maintenance/emergencies ...SDG&E expects to give two weeks' notice for planned maintenance, but little to no notice will be given for unplanned emergencies, which will require immediate dispatch.<sup>10</sup>

Additionally, for Demand Response, Energy Storage, and Interconnected Facilities, the RFO Protocol states that "Resources must be dispatchable and be capable of immediately responding to dispatches."<sup>11</sup> The RFO Protocol further states that "the project's viability will be considered in terms of its ability to reliably provide distribution capacity at or above the required amounts and thereby its ability to help ensure safety and reliability."<sup>12</sup>

The Commission recognizes that the "immediate dispatch" requirement was a technical and operational requirement that reflects SDG&E's legitimate interest in ensuring that DER solutions obtained through the RFO provide the same

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<sup>10</sup> A.L. 3187-E, RFO Protocol, p. 19

<sup>11</sup> A.L. 3187-E, RFO Protocol, p. 17, 18, 19

<sup>12</sup> A.L. 3187-E, RFO Protocol, p. 23

reliability as a traditional wires solution would provide. It is also reasonable to conclude that the “immediate dispatch” requirement in SDG&E’s Demo C RFO is a possible barrier to the deployment of distributed resources. Public Utilities Code Section 769(b)(5) states that each DRP proposal shall:

Identify barriers to the deployment of distributed resources, including, but not limited to, safety standards related to technology or operation of the distribution circuit in a manner that ensures reliable service.

Despite the statutory requirement of 769(b)(5), the immediate dispatch requirement SDG&E included in its RFO was not included in the SDG&E’s original application and was never introduced into the extensive record of the DRP Rulemaking. This requirement is significant and should have been disclosed and discussed in the approval process for the project. Had this immediate dispatch requirement been disclosed during the approval process, the Commission would have had the opportunity to determine whether the requirement itself was appropriate, or whether an alternate project without such a requirement would have been a better fit for fulfilling the objectives of Demo C.

At present, the Commission is not making any determination as to whether this requirement is appropriate or not, but directs SDG&E to address it more directly and transparently in the future, as discussed below.

**SDG&E WILL DISCUSS ITS “IMMEDIATE DISPATCH” REQUIREMENT IN THE DISTRIBUTION DEFERRAL INVESTMENT FRAMEWORK**

D.18-02-004, issued on February 15, 2018, established the DIDF to identify and capture opportunities for DERs to cost-effectively defer or avoid traditional utility investments that are planned to mitigate forecasted deficiencies of the distribution system. As part of DIDF, D.18-02-004 implemented the Distribution Planning Advisory Group (“DPAG”) to advise and recommend to the IOUs distribution deferral opportunities for solicitation, and preparation of a

Distribution Deferral Opportunity Report (“DDOR”) that includes details of candidate deferral projects and details on the expected performance and operational requirements of DERs. D.18-02-004 states:

The IOU’s proposed DPAG agendas shall, at a minimum, encompass a review of: 1) planning assumptions and grid needs report in the GNA [Grid Needs Assessment]; 2) planned investments and candidate deferral opportunities reported in the DDOR; and 3) candidate deferral prioritization. Importantly, as part of the discussion on candidate deferral opportunities, the IOUs shall present the underlying technical and operational requirements that a given DER alternative must provide in order to successfully meet the underlying grid need. Such technical requirements should be characterized within the DDOR under the “Expected performance requirements” attribute. We expect that any resulting distribution deferral RFO would not include technical or operational requirements above and beyond those presented to the DPAG.<sup>13</sup>

The Commission recognizes that the safety and reliability of the distribution system is of great importance, but also recognizes the need to accurately and transparently characterize the conditions under which DERs can be used to achieve the same safety and reliability goals as would be achieved with traditional wires projects. Therefore, we require SDG&E to prepare a written explanation and justification of the principles that it uses to determine the circumstances under which “immediate dispatch” of DERs is and is not required when DERs are being considered for the purpose of distribution infrastructure deferral. This explanation and justification shall be circulated to the members of the DPAG prior to the conclusion of the six-week DPAG review process required by D.18-02-004, Ordering Paragraph 2v.

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<sup>13</sup> D.18-02-004 at 66.

The above requirement supplements and does not replace SDG&E's existing obligations to disclose the technical and operational requirements that DERs must be able to provide in order to meet the grid needs identified in its 2018 DDOR. We affirm that immediate dispatch falls within the category of "technical and operational requirements" that must be disclosed in the 2018 DDOR and presented to the DPAG.

To ensure that requirements vetted through DDOR or DPAG are the only ones included in future solicitations, SDG&E is ordered to share its RFOs with Energy Division 45 days prior to launch. Energy Division will review the RFOs to ensure that any new terms, not disclosed in DPAG, have not been included and will work with SDG&E to resolve any issues Energy Division identifies as problematic.

### **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 and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

Comments to the Draft Resolution were filed on September 4, 2018, by the Coalition of California Utility Employees (CUE). CUE supports the Draft Resolution but did not propose any changes. However, the Commission discusses their comments below.

CUE states that the pilot's failure to result in cost-effective deployment of DERs should make the Commission question whether distribution deferral projects are a worthy endeavor to pursue. CUE states:

DERs offer many attractive benefits, but deferring traditional distribution infrastructure is not one of them...the Commission should end this futile effort and instead focus on many other ways to use DERs to achieve the State's environmental and energy goals.<sup>14</sup>

The Commission appreciates CUE's input, but CUE's input is based on limited data which is not enough to draw the conclusion that DERs cannot defer traditional distribution infrastructure. SDG&E's RFO contained the "immediate dispatch" requirement which may have affected bid pricing. This is an issue that needs further discussion for future solicitations. Additionally, with the cost of DERs decreasing, it is premature to draw the conclusion CUE arrives at.

## **FINDINGS**

1. SDG&E filed AL 3187-E on February 16, 2018 in compliance with Ordering Paragraph 26 in D.17-02-007.
2. SDG&E received multiple offers for its DRP Demo C, Circuits 295, 298, 597.
3. SDG&E performed a quantitative and qualitative analysis of all the offers.
4. SDG&E did not receive any conforming bids what were cost-effective, so no offers were shortlisted.
5. SDG&E will proceed with traditional distribution infrastructure solutions for the needs identified in Circuits 295, 298, and 597.

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<sup>14</sup> Coalition of California Utility Employees Comments on Draft Resolution E-4934. p. 2

6. SDG&E has completed the requirement of the DRP Demo C RFO as outlined in D.17-07-007 and D.17-06-012 with respect to Circuits 295, 298, and 597, but not with respect to Circuit 701.
7. The objective for using Circuit 701 for Demo C is not affected; therefore, SDG&E will continue its reports to the Commission as required by D.17-02-007 and D.17-06-012.
8. The “immediate dispatch” requirement included in SDG&E’s Demo C RFO protocol may be necessary to ensure safety and reliability, and it may also constitute a barrier to deployment of DERs.
9. The “immediate dispatch” requirement may have affected the pricing of bids in SDG&E’s Demo C RFO.
10. SDG&E should have disclosed the “immediate dispatch” requirement on the record of the DRP Rulemaking.
11. The “immediate dispatch” requirement included in SDG&E’s Demo C RFO protocol represents a technical requirement pursuant to D.18-02-004 and must be disclosed when it applies to projects included in the Distribution Deferral Opportunity Report.
12. It is prudent for the Commission to solicit more information about the “immediate dispatch” requirement, and the circumstances under which it is needed, within the Distribution Deferral Investment Framework process, per D.18-02-004.
13. It is prudent for SDG&E to share its RFOs with Energy Division to ensure that it contains only requirements vetted through DPAG.

**THEREFORE IT IS ORDERED THAT:**

1. San Diego Gas & Electric Company’s Advice Letter 3187-E is approved.

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2. San Diego Gas & Electric Company will continue its reports to the Commission on Circuit 701 as required by D.17-02-007 and D.17-06-012.
3. San Diego Gas & Electric Company will prepare a written explanation and justification of the principles that it uses to determine the circumstances under which “immediate dispatch” of DERs is and is not required when DERs are being considered for the purpose of distribution infrastructure deferral. This explanation and justification shall be circulated to the members of the DPAG prior to the conclusion of the six-week DPAG review process required by D.18-02-004, Ordering Paragraph 2v.
4. Pursuant to D.18-02-004, San Diego Gas & Electric Company must disclose in its DDOR which projects require “immediate dispatch.”
5. San Diego Gas & Electric Company is ordered to share its RFOs for projects vetted through DPAG with Energy Division 45 days prior to launch.

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 September 13, 2018; the following Commissioners voting favorably thereon:

/s/ ALICE STEBBINS

ALICE STEBBINS

Executive Director

MICHAEL PICKER

President

CARLA J. PETERMAN

LIANE M. RANDOLPH

MARTHA GUZMAN ACEVES

CLIFFORD RECHTSCHAFFEN

Commissioners