

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-5117
January 14, 2021

REDACTED RESOLUTION

Resolution E-5117. Partially approves San Diego Gas & Electric’s plan submitted in Advice Letter 3605-E to procure 164 megawatts of resources to satisfy requirements of D.19-11-016.

PROPOSED OUTCOME:

- This Resolution approves procurement by San Diego Gas and Electric (SDG&E) of 144 MW of Energy Storage resources. This procurement is in response to a Commission order from D.19-11-016.

SAFETY CONSIDERATIONS:

- SDG&E has addressed safety in their contract structure, and the resource adequacy agreements include safety provisions that require sellers to practice responsible safety management enforced by contractual terms and conditions based on standards for Acceptable Electrical Practices and all applicable laws and regulations.

ESTIMATED COST:

- Contract costs are confidential at this time. The Commission finds that the approved contracts represent a net benefit to ratepayers over their terms.

By Advice Letter 3605-E filed on September 11, 2020.

SUMMARY

This Resolution approves San Diego Gas & Electric’s (SDG&E’s) request to procure 144 megawatts (MW) of nameplate energy storage capacity to satisfy the procurement requirements ordered in D.19-11-016. This decision is part of the Integrated Resource Planning (IRP) Rulemaking (R.16-02-007), which seeks to

ensure adequate and efficient resources are present to provide energy for California’s future in line with the State’s environmental goals. The resolution also denies requests to procure 40 MW of energy storage resources.

Table 1, below, provides a summary of the five resources selected in SDG&E’s Request for Offers (RFO). Three of the contracts are approved, and the other two are denied.

Table 1. Contract Summaries

| Counterparty / Project Name | Technology type | Contract type | Nameplate Capacity (MW) | Online Date | Term of Agreement (Years) | Approved |
|---|-----------------|----------------------------|-------------------------|--------------------------------------|---------------------------|----------|
| LS Power/ Vista Energy Storage/ San Diego County | Energy Storage | Resource Adequacy contract | 10 | 8/1/2021 (plus 10 MW 8/2/2022) | 15 | yes |
| Terra Gen/ Valley Center Energy Storage/ San Diego County | Energy Storage | Resource Adequacy contract | 50 | 8/1/2021 | 15 | yes |
| Terra Gen/ Valley Center Energy Storage II/ San Diego County | Energy Storage | Power Purchase Agreement | 54 | 8/1/2021 | 15 | yes |
| Fluence/ Melrose Energy Storage/ San Diego County | Energy Storage | Utility Owned | 20 | 8/1/2021 | n/a | no |

| Counterparty / Project Name | Technology type | Contract type | Nameplate Capacity (MW) | Online Date | Term of Agreement (Years) | Approved |
|---|-------------------|------------------|-------------------------|-------------|---------------------------|----------|
| Fluence/ Kearny Energy Storage/ City of San Diego | Energy Storage | Utility Owned | 20 | 8/1/2021 | n/a | yes |

BACKGROUND

Integrated Resource Planning

In Decision (D).19-11-016 (Decision), the California Public Utilities Commission (CPUC or the Commission) established 2021 through 2023 (near term) procurement requirements for all California jurisdictional load serving entities (LSEs) to procure a share of a total of 3,300 MW of incremental resource adequacy (RA) capacity to come online by August 1, 2023. Additionally, 50 percent of each LSE’s portion of the requirement must come online by August 1, 2021. SDG&E’s share of the total requirement is 292.9 MW for its current bundled customers and 8.4 MW for customers of opt-out LSEs. This means at least 150.65 MW is due online by August 1, 2021. Pursuant to D.19-11-016, community choice aggregators (CCAs) and electric service providers (ESPs) were given an opportunity to elect not to self-provide their procurement requirements by notifying the Commission by February 15, 2020. To the extent these LSEs elected not to self-provide, the Commission required the relevant investor-owned utility (IOU) to procure on behalf of these opt-out LSEs and have the costs allocated to the customers of these LSEs on a non-bypassable basis based on a modified cost allocation mechanism (CAM).

The Decision also requires that the IOUs conduct all source solicitations to procure their share to the procurement requirement and submit the results of these solicitations in Tier 3 Advice Letters that contain a description of the solicitation and procurement process, including:

- a. Metrics used to compare bids received in the solicitation;
- b. Metrics used to compare utility-owned resource options, using Appendix A, Section 2c, of Decision 19-06-032 as a guide; and
- c. Demonstration of incrementality to the baseline given in Ordering Paragraph 5 of this Decision.

Details of SDG&E's Request for Offers

SDG&E launched its RFO on December 13, 2019, in response to Decision 19-11-016. A single solicitation was conducted to procure resources to come online by August 1 of 2021, 2022, and 2023.

All projects were required to be eligible for system RA, and to include Full Capacity Deliverability Status (FCDS). Other attributes, such as Local RA, renewable energy credits, and energy were allowed as well. All projects were required to be incremental to the baseline resource assumptions identified by the Commission in D.19-11-016.

The following table documents SDG&E's RFO schedule:

| Date RFO Event |
|---|
| December 13, 2019 RFO Launch |
| January 10, 2020 Pre-Bid Conference |
| February 7, 2020 Deadline for Bid Submittal |
| May 20, 2020 Initial Shortlist Notification |
| August 31, 2020 Contract Execution Date for 2021 COD Offers |
| October 15, 2020 Contract Execution for 2022-23 COD Offers |

SDG&E calculated a net present value, and also what they refer to as a net score, for each resource. A net present value methodology entails (1) forecasting the project benefits and costs over the life of the offer; (2) applying time value of money (3) estimating the net present value as the present value of the benefits minus the present value of the cost; and (4) normalizing the ranking of each offer by an Net Present Value (NPV) metric (RA kW-month). In the net score

calculation, SDG&E uses additional factors including project viability and estimated avoided renewable curtailment to further adjust the NPV.

SDG&E engaged an Independent Evaluator (IE), PA Consulting, Inc, from the Commission's approved list of IEs for the RFO. The IE was involved throughout the RFO process which included: reviewing the RFO documentation, the valuation process, and other documents exchanged by parties through the RFO process and attending numerous conference calls and negotiation sessions.

SDG&E consulted with the Procurement Review Group (PRG) and CAM PRG at several points of the process. Consultations regarding the launch of the RFO, the proposed shortlist, additional procurement for other LSEs, and selection recommendations were all held with the relevant groups and participants were given the opportunity to provide input.

Cost Recovery

SDG&E proposes to establish a new memorandum account to track costs, the Resource Adequacy Procurement Memorandum Account or RAPMA. SDG&E plans to use this account to track costs related to procurement undertaken to fulfill requirements of D.19-11-016. The account is intended to be temporary until a Modified CAM is finalized in R.20-05-003.

Details of SDG&E's requests for relief in Advice Letter 3605-E

SDG&E requests that the Advice Letter and the contracts contained in the Advice Letter be approved in a resolution by the Commission in its December 17th meeting.

Supplemental Advice Letters

On November 12, 2020, SDG&E filed a Supplemental Advice Letter, 3605-E-A. The supplement contains additional details and information that were required to be filed with the advice letter according to D.19-11-016. In its protest, the California Public Advocates Office (CalPA) had raised this deficiency, and SDG&E responded that they had submitted similar information in response to data requests previously. However, D.19-11-016 required that this information be filed with the advice letter.

In addition, SDG&E subsequently realized that they had made a clerical mistake in the modelling of NPV for resources. The correction did not make appreciable differences in the overall estimated benefits and was uniform across resources. SDG&E filed Supplemental Advice Letter 3605-E-B on December 4, 2020 to correct this error.

SDG&E's initial advice letter did not include details needed to evaluate the proposed procurement and required two supplemental filings. This delayed the Commission's review of these contracts.

NOTICE

Notice of Advice Letter 3605-E was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of Advice Letter 3605-E was distributed in accordance with Section 4.3 of G.O. 96-B. SDG&E also states that copies of Supplemental Advice Letters 3605-E-A and 3605-E-B were served on the GO 96-B, R.16-02-007, and R.20-05-003 service lists, as well as the parties that protested and responded to Advice Letter 3605-E.

PROTESTS AND RESPONSES

Advice Letter 3605-E was timely protested by the CalPA, San Diego Community Power (SDCP), and Clean Energy Alliance (CEA) on October 1, 2020. SDG&E timely filed a reply to the protests on October 8, 2020. Fluence and Alliance for Retail Energy Markets (AREM) both filed responses to Advice Letter 3605-E. The issues raised in protests and responses are detailed below and discussed further in the Discussion section of the Resolution.

Utility Owned Generation projects

CalPA raises several issues in their protest, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Inclusion of bid evaluation metrics and data in Advice Letter 3605-E

Included in the CalPA protest was a request that SDG&E be required to file complete data on their bid evaluation metrics as part of the advice letter. SDG&E replied that they had submitted this information in response to data requests several months before the advice letter was filed. Ultimately, in consultation with Commission staff, SDG&E determined that the additional information was required and they included this in Supplemental 3605-E-A on November 12, 2020.

Use of avoided curtailment as a bid evaluation metric

CalPA also protested the inclusion of “avoided curtailment” in SDGE’s bid evaluation metrics. Specifically, they requested that the Commission require that this metric be reviewed and possibly developed further before its use is continued in standard track bid evaluation or other procurement activities. SDG&E replied that they believe that their use of the metric is in line with Commission goals as stated in D.19-11-016.

GHG reduction

CalPA also requests that SDG&E be asked to certify or quantify greenhouse gas (GHG) reductions that will accrue with the use of the newly contracted resources.

Appropriateness of long-term contracts and assignability of contracts

SDCP and CEA protested the advice letter on grounds relating to the length of the contracts and potential major changes to SDG&E’s customer base in the near future. If significant numbers of customers leave SDG&E for a CCA in the future, those customers will still be responsible for their share of capacity costs incurred by SDG&E while they were SDG&E customers though non-bypassable charges. SDCP and CEA request that the Commission reject the Advice Letter and order SDG&E to procure shorter term contracts from existing resources so that future potential CCAs are not burdened with SDG&E’s long term decisions. SDG&E responds that such short term planning is unlikely to allow the state to meet its

climate and energy goals, and that they did not receive qualifying bids for the types of resources that could have been signed for shorter term contracts.

DISCUSSION

Advice Letter 3605-E and supplemental Advice Letters 3605-E-A and 3605-E-B are partially approved and partially denied. The relevant facts that lead to our decision are discussed below.

SDGE's RFO process and subsequent filings did not meet the urgency of the current need for capacity and procurement timeline.

D.19-11-016 requires all jurisdictional LSEs serving load in the CAISO balancing authority to procure a portion of the 1,650 MWs of total capacity to be online by August 1, 2021. The IOUs are also required to procure on behalf of LSEs that elect to not self-provide their portion of these requirements. Additionally, LSEs must report their methods and metrics used to evaluate all bids received, determine which resources to procure, and demonstrate that procured resources are incremental to the baseline determined in the IRP proceeding.

In its IE report on the solicitation and procurement process, PA Consulting noted that SDG&E “extended what would normally have been appropriate outreach”¹ for this procurement, which was not a normal procurement cycle. Given the urgency of the procurement and the level of competition around the state for new resources during this cycle we believe that SDG&E should have put forth a greater effort. PA Consulting also states that SDG&E’s bid evaluation team “could have been more communicative with bidders about bid conformance, and [they could have] allowed more opportunities to cure non-conformance”² in order to increase the pool of bids. This appears to have limited the pool of bidders and bids available in this solicitation. Other IOUs took more proactive approaches to meeting the requirements of D.19-11-016 and had significantly better results.

¹ AL 3605-E Appendix C page 3

² AL 3605-E Appendix C page 3

SDGE's Resource Adequacy only contracts are reasonable and are approved.

The RA only contracts included in SDG&E's advice letter fulfill part of the requirement that was placed on SDG&E in the decision. These contracts represent 60 MW of capacity due to be online by August 1, 2021 and an additional 10 MW due to be online by August 1, 2022.

SDG&E's Net Present Value calculations rely on novel assumptions

[REDACTED]
[REDACTED] Our assessment is that this [REDACTED] is based on historic levels of participation by energy storage resources in relatively small [REDACTED] markets. As the energy storage fleet grows in the coming years, it is not reasonable to assume that the rate of [REDACTED] participation in [REDACTED] markets will continue. [REDACTED] Comparisons to other IOUs' contract prices and other valuation methodologies serve to reinforce this judgement. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

However, the overall value proposition of the resource represented by this contract is within acceptable bounds, particularly when compared to the cost of trying to replace it now, with very limited time between now and August 2021. While this Resolution approves this tolling contract, SDG&E should work to improve their modeling of resource benefits calculations in the future.

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]



After publication of the Draft Resolution, SDG&E and the counterparty Fluence renegotiated the Kearny UOG contract to ensure it would be able to comply with all requirements of the decision and filed comments to that effect in response to the Draft Resolution.

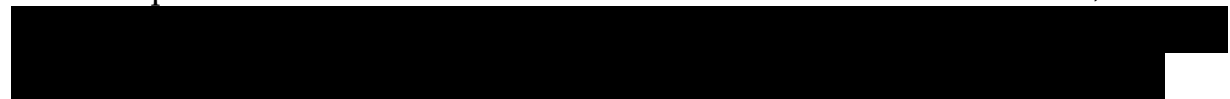
The contract for the UOG Kearny resource is approved subject to a compliance filing including the new contract detailing the contract changes that were discussed in SDG&E's original response to the Draft Resolution. The application for approval of the Melrose UOG contract is not approved.

Protests and other issues

Unique bid evaluation methods

CalPA cited several novel criteria or treatments that were used by SDG&E to evaluate bids and asked the Commission to direct SDG&E to forego the use of one in particular, avoided curtailment, until it is more fully vetted. We agree that SDG&E's use of avoided curtailment as a measure of renewable integration requires more development. CalPA protest is granted in this regard.

We also question several other factors used in SDG&E's bid evaluation,



GHG Reduction Requirements

CalPA requests that SDG&E be compelled to demonstrate that its procured resources will lead to a reduction in GHG emissions. Energy Storage resources do not contribute directly to GHG, criteria pollutants, or local air pollution. The

actual change in emissions due to energy storage charging is a complex issue that will not be controllable by or visible to the individual energy storage resource. Energy storage resources can store inexpensive power, often generated by zero marginal cost renewable generation, and release it at later times when prices are higher. Those higher prices are often set by gas fired generation. The State and the Commission have implemented many policies to increase the functionality and development of the storage fleet in order to facilitate this movement of clean energy to displace polluting generating resources. SDG&E's decision to choose contracts that follow this path is prudent, and we do not grant CalPA's request on this subject.

Pursuit of shorter-term contracts

SDCP and CEA request that SDG&E be required to sign shorter term contracts. We agree with SDG&E that shorter contract lengths "do not support development of the type of resources needed by the State to meet its GHG mitigation targets."³ Additionally, we agree with SDG&E's assertion that is unlikely that shorter term contracts would provide better value for ratepayers in the long run. SDCP and CEA's request is not granted.

Contract Details for Utility Owned Projects



Other responses to Advice Letter

³ SDGE reply to protest page 5

The Commission has received multiple responses from parties in support of the Advice Letter and some with additional comments on the Advice Letter.

AReM filed a response seeking clarification on what portion of the proposed contracts would be attributed to opt-out LSEs, and seeking a statement from the Commission that cost allocation and recovery for bundled customers will be determined in R.20-05-003. In response, we clarify that details on cost allocation, including portions of procurements attributed to opt-out LSEs are appropriately addressed in R.20-05-003.

Fluence filed a response supporting the Advice Letter and requesting expeditious approval. We agree with their assertion that the Advice Letter needs to be reviewed promptly. Commission Staff have worked to review and evaluate this promptly; however, the completion of staff's review was dependent on receiving additional materials only submitted by SDG&E in supplemental advice letter filings.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this Draft 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.

SDG&E timely filed comments on the Draft Resolution on December 30, 2020. In these comments, SDG&E laid out a plan to modify the Kearny UOG contract to bring it in line with the requirements of Decision 19-11-016.

Public Advocates Office (CalPA) timely filed comments on the Draft Resolution requesting that the Commission change the compliance mechanism for rejected

capacity from a letter to the Executive Director to an expedited Tier 3 Advice Letter. We do not agree with the comments from Cal Advocates and believe that requiring a letter to the Executive Director for this matter is consistent with Commission practice.

Direct Access Customer Coalition timely filed comments on the Draft Resolution on January 4, 2021. In these comments, they request that the Commission find that any excess costs and penalties incurred in replacement of capacity not approved in the Draft Resolution be borne by SDG&E alone and not by ratepayers or customers of opt out LSEs or other customers that may be subject to non-bypassable charges. Concerns about costs borne by opt-out LSEs and others subject to non-bypassable charges in relation to this procurement will be addressed with development of Modified Cost Allocation Mechanism in the IRP proceeding.

The Protect Our Communities Foundation timely filed comments on the Draft Resolution on January 4, 2021. In their comments, PCF largely reiterated concerns voiced by San Diego Community Power (SDCP), and Clean Energy Alliance (CEA) in their October 1, 2020 protest to the Advice Letter. We direct them to our response to that protest.

CAISO timely filed comments on the Draft Resolution on December 30, 2020. CAISO's comments urge the Commission to ensure that any replacement capacity required by the Resolution is procured in a timely fashion in order to avoid potential issues for August of 2021 and later. We agree with CAISO that this is an important issue and anticipate that Staff and CAISO staff will continue collaborating on addressing Summer Readiness issues including the need to ensure full compliance with D.19-11-016.

Fluence timely filed comments on the Draft Resolution on January 4, 2021. Fluence's comments discuss the work done with SDG&E on the UOG contracts to try to bring them into compliance with Decision requirements. Fluence also requests that the Commission exert influence on local permitting authorities to prioritize the permit applications for these resources. The Commission trusts that local authorities discharge their duties with appropriate concern for such factors.

CESA timely filed comments on the Draft Resolution on January 4, 2021. CESA comments that they do not have access to the unredacted version of the Resolution but they understand that SDG&E and Fluence have been negotiating to amend the contracts to address the Commission's concerns. CESA states that they support approval of those amended contracts on the assumption that they are able to satisfy all the concerns of the Commission. We agree with CESA and the final Resolution reflects this view.

FINDINGS AND CONCLUSIONS

1. SDG&E's Advice Letter 3605-E and proposed contracts fell short of the requirements included in Decision 19-11-016. In response to the Draft Resolution, SDG&E proposed changes to one of the utility owned generation (UOG) contracts that makes that contract acceptable.
2. SDG&E filed supplemental Advice Letters to address these deficiencies and the delay of time to receive additional information from SDG&E has delayed the Commission's consideration of these contracts.
3. The Commission finds the Resource Adequacy only contracts and tolling agreement, and SDG&E's entry into them, are reasonable and prudent. Any payments made by SDG&E pursuant to the Resource Adequacy only contracts and the net costs of the tolling agreement are recoverable by SDG&E through the ERRA proceeding, subject to the Commission's review of SDG&E's prudent administration of the contracts.
4. The Commission finds that the utility owned generation (UOG) contract for the Kearny resource can be approved subject to a compliance filing that modifies contracts in accordance with the changes described in SDG&E's response to Draft Resolution E-5117 . The UOG contract for the Melrose resource is denied.
5. We take issue with several assumptions SDG&E made in its Net Present Value (NPV) calculations and direct staff to take these issues up with SDG&E through the Procurement Review Group process.

6. The Commission finds that SDG&E’s use of an avoided curtailment value in its bid evaluation method is not fully developed and shall not be used by SDG&E in any subsequent procurement until it can be evaluated in the proper Commission proceeding.
7. The Commission finds that other elements of SDG&E’s bid evaluation methodology require further consideration before they can be included in future bid evaluation metrics.
8. The Commission finds that it is reasonable to authorize the Modified Cost Allocation Mechanism being developed in the Integrated Resource Planning proceeding, once it is finalized, to apply to the Resource Adequacy only and tolling contracts.
9. Additional GHG impact analysis that can attribute specific GHG reductions to specific contracts that will operate in the wholesale market is not a prerequisite for approval or partial approval of AL 3605-E.

THEREFORE IT IS ORDERED THAT:

1. The Resource Adequacy only contracts and tolling agreement contained in Advice Letter 3605-E are approved. The Kearny Utility Owned Generation (UOG) contract is approved subject to a compliance filing that contains the updated contract for the utility owned generation resource as described in SDG&E’s January 8, 2021 corrected comments on Draft Resolution E-5117. The compliance filing shall also include an assertion and any necessary details that will ensure that no compromises or degradation to safety standards will occur as a result of modifications to contracts or timelines for any of these resources.

| Counterparty / Project Name | Technology type | Contract type | Nameplate Capacity (MW) | Online Date | Term of Agreement (Years) | Approved |
|---|-------------------|----------------------------------|-------------------------|---|---------------------------|----------|
| LS Power/ Vista Energy Storage/ San Diego County | Energy Storage | Resource Adequacy contract | 10 | 8/1/2021 (plus 10 MW 8/2/2022) | 15 | yes |

| | | | | | | |
|---|-------------------|----------------------------------|----|----------|-----|-----|
| Terra Gen/ Valley Center Energy Storage/ San Diego County | Energy Storage | Resource Adequacy contract | 50 | 8/1/2021 | 15 | yes |
| Terra Gen/ Valley Center Energy Storage II/ San Diego County | Energy Storage | Power Purchase Agreement | 54 | 8/1/2021 | 15 | yes |
| Fluence/ Kearny Energy Storage/ City of San Diego | Energy Storage | Utility Owned | 20 | 8/1/2021 | n/a | yes |

2. The following Utility Owned Generation contract contained in Advice Letter 3605-E is not approved.

| Counterparty / Project Name | Technology type | Contract type | Nameplate Capacity (MW) | Online Date | Term of Agreement (Years) | Approved |
|---|----------------------------|--------------------------|--|------------------------|--|-----------------|
| Fluence/ Melrose Energy Storage/ San Diego County | Energy Storage | Utility Owned | 20 | 8/1/2021 | n/a | no |

3. SDG&E shall further develop their bid evaluation methodology, either refining or excluding in the future the value of avoided curtailment.
4. SDG&E shall make further refinements to bid evaluation models in consultation with Energy Division staff and others through the Procurement

Review Group process.

5. SDG&E shall replace the 20 MW of rejected resources with other resources that meet all the requirements of D.19-11-016 by August 1, 2021, and report this additional make-up procurement in a letter to the CPUC Executive Director.
6. SDG&E shall make a compliance filing in the form of a Tier 1 Advice Letter containing the modified contract for the Kearny Utility Owned Generation resource and asserting that no compromises or degradations of safety standards will result from changes to contracts or timelines for resources approved in this resolution.

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 January 14, 2021; the following Commissioners voting favorably thereon:

/s/Rachel Peterson
Rachel Peterson
Executive Director

MARYBEL BATJER
President

MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
Commissioners