Resolution E-4901. San Diego Gas & Electric requests approval of Bilateral Power Purchase Tolling Agreements from existing combined heat and power facility.

PROPOSED OUTCOME:
- This Resolution approves an Agreement between San Diego Gas & Electric ("SDG&E") and Applied Energy, LLC ("AEI").

SAFETY CONSIDERATIONS:
- The terms of the Agreement state AEI must operate and maintain the facility within the terms of prudent electrical practices. SDG&E submitted a safety plan for the facilities that was certified by a licensed California engineer.

ESTIMATED COST:
- The cost of the Agreement is confidential.

By Advice Letter 3101-E, Filed on July 28, 2017.

SUMMARY
This Resolution approves (1) two Combined-Heat-and-Power power purchase tolling agreements (PPTAs) that San Diego Gas & Electric (SDG&E) executed with Applied Energy, LLC (AEI), (2) the Amendments to the existing PPAs, and (3) the RA Contracts.

The first of the two agreements (PPTAs or Agreements) was executed as part of SDG&E’s 2016 CHP RFO, where it shortlisted the Naval Station offer for further negotiations. Near the end of negotiations on the Naval Station PPTA, AEI
extended a bilateral offer to SDG&E for a PPTA for North Island that was competitive with the shortlisted offer for Naval Station and which SDG&E accepted.

Coincident with the start of the PPTAs’ terms, the existing Qualifying Facility (“QF”) power purchase agreements (the “Existing PPAs”) for North Island, Naval Station, and a third AEI facility, the Naval Training Center San Diego, will terminate in advance of their scheduled end dates.

The term for both the North Island and Naval Station facility contracts is seven years and SDG&E requests the Commission approve the Agreement by November 1, 2017 to meet the requirements of the contract. In the event the Commission approves the contract by November 1, 2017, SDG&E will still require approval from the US Navy to fully execute the contract. The Effective Date will thus be immediately after the Resolution is adopted.

**BACKGROUND**

*Background on Relevant terms of the CHP/QF Settlement*

On December 16, 2010, the Commission adopted the Qualifying Facility and Combined Heat and Power Program Settlement Agreement (Settlement) with the issuance of Decision (D).10-12-035. The Settlement resolves a number of longstanding issues regarding the contractual obligations and procurement options for facilities operating under legacy and qualifying facility contracts.

The Settlement establishes megawatt (MW) procurement targets and GHG Emissions Reduction Targets the investor-owned utilities (IOUs) are required to meet by entering into contracts with eligible CHP Facilities, as defined in the Settlement.

Pursuant to D.10-12-035, the three large electric IOUs must procure a minimum of 3,000 MW of CHP and reduce GHG emissions consistent with the California Air Resources Board (CARB) Scoping Plan, currently set at 4.8 million metric tons (MMT) by the end of 2020.
Per Section 4.2 of the Settlement Term Sheet, the IOUs are directed to conduct Requests for Offers (RFOs) exclusively for CHP resources as a means of achieving their MW and GHG Emissions Reduction Targets. In addition, per Section 4.3 of the Settlement Term Sheet, bilaterally negotiated and executed CHP Power Purchase Agreements (PPAs) are included among the procurement options in the CHP Program. Pricing, terms, and conditions will be determined according to the executed and approved PPA. The use of an independent evaluator (IE) is required for bilateral negotiations between an IOU and its negotiating partner.

Under D.15-06-028, the Greenhouse Gas Emissions Reduction Targets were revised to collectively achieve 2.72 MMT of emissions reductions from CHP facilities by 2020. The agreement also established a schedule of four competitive solicitations for CHP facilities during the Second Program Period, which began on November 23, 2015.

In accordance with D.15-06-028, SDG&E launched a CHP RFO in February 2016. In June of 2016, SDG&E shortlisted the Naval Station offer for further negotiations. Near the conclusion of negotiations on the Naval Station PPTA, AEI extended a bilateral offer to SDG&E for a PPTA for North Island that was competitive with the shortlisted offer for Naval Station and which SDG&E accepted. The parties concluded negotiations on the North Island bilateral PPTA on terms identical with the Naval Station PPTA (other than differences in physical description and operating attributes of the North Island facility).

*Background on Naval Station and North Island CHP facilities*

The Naval Station generating unit is a 48 MW combined cycle gas turbine, and the North Island generating unit is a 38.6 MW LM-6000 combined cycle gas turbine. The units are each located on sites owned by the United States Department of Navy (the “Navy”) under long term leases held by AEI. The Naval Station unit is situated at the 32nd Street Naval Station just south of downtown San Diego and interconnects to SDG&E’s Division Street substation. The North Island unit is located at Naval Air Station North Island and interconnects to SDG&E’s North Island Metering Switchyard.
SDG&E Settlement Targets

The PPTAs further the goals of the CHP Settlement by converting SDG&E’s legacy contracts with Naval Station and North Island from must-take as-available energy to fully dispatchable by SDG&E. The agreements put SDG&E’s total MWs procured from CHP at approximately 224 MW, exceeding the obligation to procure at least 211 MW from the Settlement.

NOTICE

Notice of AL 3101-E was made by publication in the Commission’s Daily Calendar. San Diego Gas & Electric states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

Advice Letter AL 3101-E was not protested.

DISCUSSION

On July 28, 2017, SDG&E filed Advice Letter 3101-E requesting Commission approval of an Agreement with AEI, Amendments to their Existing PPTAs, and RA Contracts.

Specifically in this Advice Letter, SDG&E requested that the Commission:

1. Approve the Agreement in its entirety;
2. Find that the Agreement, and SDG&E’s entry into the Agreement, is reasonable and prudent for all purposes, subject only to further review with respect to the reasonableness of the agreement;
3. Find that 0.069869 MMT of GHG emissions reductions associated with the Agreement applies toward SDG&E’s GHG Target;
4. Find that the Agreement exceeds SDG&E’s need to procure 211 MW from CHP by SDG&E procuring a total of approximately 224 MW;
5. Find that the Agreement is in compliance with the Emissions Performance Standard; and

6. Find that SDG&E’s costs under the Agreement shall be recovered through SDG&E’s Cost Allocation Mechanism (CAM)

Energy Division evaluated the Proposed PPAs based on the following criteria

- Consistency with D.10-12-035, which approved the QF/CHP Program Settlement, including:
  - Consistency with:
    - GHG Counting Rules
    - CHP MW Counting Rules
  - Need for Procurement
  - Cost Reasonableness
  - Public Safety
  - Project Viability
  - Consistency with the Emissions Performance Standard
  - Consistency with D.02-08-071 and D.07-12-052, which respectively require Cost Allocation Mechanism Group participation
  - Energy Division typically considers the analysis and recommendations of an Independent Evaluator (IE), if available.
  - Disadvantaged Community Designation

Consistency with D.10-12-035, which approved the QF/CHP Program Settlement,

Consistency with Definition of CHP Facility and Qualifying Cogeneration Facility

To be eligible to count towards Settlement MW and GHG goals, all CHP facilities, excluding those that convert to Utility Prescheduled Facilities, must meet the federal definition of a qualifying cogeneration facility under 18 C.F.R. § 292.205 by the term start date and through the duration of the proposed PPA, and must also maintain QF certification. With reference to the federal regulations, the Settlement establishes minimum operating and efficiency requirements for topping-cycle facilities and establishes efficiency standards for bottoming-cycle facilities. AEI’s CHP facility meets the terms of the Settlement.

Consistency with GHG Counting Rules
Under the goals of the CHP Settlement, the PPTAs convert SDG&E’s legacy contracts with Naval Station and North Island from must-take, as-available energy to fully dispatchable energy. The reduced run time reduced costs and GHG emissions. The combined projects will result in an expected GHG Credit of 0.069869 MMT (0.043076 MMT from Naval Station and 0.026793 MMT from North Island).

**Consistency with MW Counting Rules**

Under the goals of the CHP Settlement, SDG&E was ordered to procure at least 211 MW from CHP. The combined projects will result in an expected 86.6 MW. The agreements put SDG&E’s total MWs procured from CHP at approximately 224 MW, exceeding the obligation to procure at least 211 MW from the Settlement.

**Need for Procurement**

SDG&E currently has only 137 MW of CHP capacity under contract pursuant to this settlement and needs the capacity of both facilities to meet its 211 MW target. SDG&E needs to procure this CHP resource in order to meet its GHG reduction requirement under the CHP Agreement.

**Cost Reasonableness**

The price of the Agreements were the least cost offers SDG&E received to meet its CHP needs. More information on the cost of this proposal is contained in the Confidential Appendix.

**Public Safety**

Pursuant to D.15-06-028, SDG&E provides a report from an independent, California licensed engineer certifying that the AEI Facilities have a feasible
safety plan. Energy Division reviewed the safety plan, the engineer’s certification and finds that it meets the requirements set forth in D.15-06-028.

**Consistency with Emissions Performance Standard**

In D.07-01-039, the Commission adopted a greenhouse gas Emissions Performance Standard (“EPS”) which is applicable to an electricity contract for baseload generation, as defined, having a delivery term of five years or more. According to D.07-01-039, the EPS applies to generation facilities expected to have a capacity factor in excess of sixty percent (60%). For CHP facilities with a capacity factor above 60% and a term of greater than five years, the EPS applies unless the emissions from that portion of the thermal output that is used to generate electricity under the PPTA is less than one thousand one hundred metric tons of carbon dioxide equivalent per MWh (1,100 CO2e /MWh). The Naval Station and North Island facilities are each expected to operate at a capacity factor significantly below the 60% threshold throughout their delivery term, and therefore the EPS does not apply to these agreements.

**CAM Group Participation**

SDG&E briefed its CAM Procurement Review Group (“PRG”) on the PPTAs on the following dates:

The Naval Station PPTA was presented and discussed on May 20, 2016, December 16, 2016, January 20, 2017 and April 21, 2017; the North Island PPTA was presented and discussed on April 21, 2017. SDG&E did not receive any negative feedback on either PPA. SDG&E has complied with the Commission’s rules for involving the CAM group.

**Independent Evaluator**

SDG&E engaged Sedway Consulting, Inc. to act as Independent Evaluator (IE) for its 2016 CHP RFO and the IE participated in all elements of the RFO
including participating in meetings and monitoring all communications between the parties.

Disadvantaged Community Designation

Senate Bill 350 (de León, Chapter 547, Stats. 2015) contains disadvantaged community goals that are cross-cutting and therefore will be integrated into all policy areas.

The Naval Station facility, including the CHP generating unit, lays within Census Tract 6073003800, which is not a CalEnviroScreen Version 3.0 designated Disadvantaged Community. The North Island facility, including the CHP generating unit lays within Census Tract 6073011300, which is not a CalEnviroScreen Version 3.0 designated Disadvantaged Community.

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 on January 18, 2018. No comments were received for this resolution.

FINDINGS

1. Commission Decision 10-12-035 directed SDG&E to procure 211 MW of combined heat and power capacity and established 0.50 MMT GHG reduction target.
2. On July 28, 2017, San Diego Gas & Electric (SDG&E) filed Advice Letter (AL) 3101-E seeking approval of a power purchase agreement with Applied Energy, LLC (AEI) (1) two Combined-Heat-and-Power power purchase tolling agreements (PPTAs) that San Diego Gas & Electric (SDG&E) executed with Applied Energy, LLC (AEI), (2) the Amendments, and (3) the RA Contracts.
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3. The cost associated with the PPTAs is just and reasonable.
5. The Naval Station and North Island facilities are each expected to operate at a capacity factor significantly below the 60 percent threshold throughout their delivery term, and therefore the Emissions Performance Standard does not apply to these agreements.
6. The Facilities are not located in a disadvantaged community designated by CalEnviroScreen.

THEREFORE IT IS ORDERED THAT:

1. The request of San Diego Gas & Electric to approve the power purchase tolling agreements executed with Applied Energy, LLC, the amendments to the existing PPAs, and the resource adequacy contracts are approved and San Diego Gas and Electric is authorized to recover costs via the cost allocation mechanism, as proposed in Advice Letter 3101-E.

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 March 1, 2018; the following Commissioners voting favorably thereon:

/s/ ALICE STEBBINS
ALICE STEBBINS
Executive Director

MICHAEL PICKER
President
CARLA J. PETERMAN
LIANE M. RANDOLPH
MARLHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Confidential Appendix A

APPENDIX REDACTED