

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ITEM # 9

AGENDA ID # 16571

ENERGY DIVISION

RESOLUTION E-4925 (Rev. 1)

July 12, 2018

R E S O L U T I O N

Resolution E-4925. Approves Southern California Edison's request for greenhouse gas reduction credits from the shut-down of Carson Cogeneration Company facility.

PROPOSED OUTCOME:

- This Resolution grants Southern California Edison's (SCE) request to claim greenhouse gas (GHG) reduction credits towards its Combined Heat and Power (CHP) program abatement targets.

SAFETY CONSIDERATIONS:

- There are no new safety risks associated with the approval of this contract.

ESTIMATED COST:

- There is no cost impact.

By Advice Letter 3681-E, filed on October 25, 2017.

---

SUMMARY

This Resolution grants Southern California Edison's (SCE) request for approval to claim greenhouse gas (GHG) reduction credits towards its Combined Heat and Power (CHP) program abatement targets. SCE seeks GHG abatement credits from the Termination & Shutdown Agreement (Termination Agreement) between SCE and Carson Cogeneration Company, LLC (Carson), dated as of June 1, 2017.

## **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 resolved 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 tonnes (MMT) by the end of 2020.

Sections 6 and 7 of the Settlement Term Sheet provides accounting methodology and principles for the IOUs and the CPUC to track GHG emissions reductions as a result of various activities, including contracting new CHP facilities, physically changing a CHP facility, shutting down existing CHP facilities, changing operations, etc.

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.

### *Background on the Carson Cogeneration Facility*

SCE and Carson executed a Power Purchase Agreement (Legacy Contract) on June 10, 1985 for the procurement of energy and capacity from Carson for a 30-year term. The CHP Settlement required that SCE offer its CHP contracts the option to negotiate the terms of the pro forma Power Purchase Agreement or amend an existing Legacy Contract. Carson elected to enter into an amended and

restated agreement, composed of an Edison Energy Institute Master Agreement to govern the terms of the transaction, a resource adequacy (RA) confirm for RA benefits, and an energy-only tolling confirm for procurement of energy and ancillary services.

The Carson plant (the Facility) was a natural-gas fired CHP generating facility with a capacity of 48 MW located in Carson, California. Under the Legacy Contract, the Facility was required to serve the steam and electricity needs of a host entity to satisfy PURPA Qualifying Facility (QF) CHP requirements. Under the terms of the new Agreement, Carson was no longer obligated to maintain its steam host and gave up its CHP capabilities, making it a combined cycle gas turbine generating facility. By transitioning from baseload generation to dispatchable generation and becoming a UPF in 2012, SCE claimed 32,563.6 metric tonnes (MT) of GHG credits towards its CHP GHG reduction targets.

*Background on the Termination Agreement*

SCE and Carson executed the Termination Agreement on June 1, 2017, terminating the Contract thirty-two months before the original term. SCE asserts terminating the Contract was in the best interest of ratepayers, including the cost of the termination payment, without accounting for GHG reduction benefits. SCE asserts it intends to seek approval for the Termination Agreement through its annual ERRRA filing, and thus in AL-3681 only seeks Commission approval to allow SCE to claim the GHG credits associated with the incremental reduction in emissions caused by the permanent shutdown of the Facility, a dispatchable tolling resource.

*Settlement Accounting for CHP Procurement and GHG Emissions Reduction Target*

SCE calculated whether the Facility was efficient or inefficient compared to the Double Benchmark Heat Rate (8,300 Btu/kW-hr.) and determined that Carson was 'inefficient'.

SCE notes that Carson had given up its thermal need in 2013 and had been operating as a dispatchable combined cycle gas-fired generating facility. As Carson had no thermal need, SCE then references Section 7.3.1.4.2 of the

Settlement Agreement, describing Carson as similar to other facilities “whose thermal need no longer continues:”

[M]easurement is based on the Baseline year emissions minus the projected PPA emissions and emissions associated with replacing one hundred percent (100%) of the decreased electric generation at a time differentiated Heat Rate. The baseline year emissions are the average of the previous two (2) calendar years of operational data.

After performing this calculation, SCE determined that the Termination Agreement contributes 1,682 MT of GHG Credit towards their target.

In the course of reviewing its workpapers and after the submission of AL 3681, SCE realized that it needed to revise the GHG emissions reductions resulting from the Termination Agreement. On February 28, 2018, SCE submitted a supplemental filing to AL 3681 revising its GHG emissions reductions Credit to 1,488 MT.

## **NOTICE**

Notice of AL 3681-E was made by publication in the Commission’s Daily Calendar. Southern California Edison 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 3681-E was protested.

### **ORA’s Protest**

SCE’s Advice Letter 3681-E was timely protested by the Office of Ratepayer Advocates (ORA), filed on November 14, 2017. In its protest, ORA raised two main issues:

- Whether SCE demonstrates that Carson met the definition of a CHP Facility at the time of the Termination Agreement.

- Whether SCE correctly calculated its GHG Credit, using the heat rate required by the Settlement Agreement Term Sheet.

On the first point, ORA notes that SCE is claiming GHG Credits towards its CHP GHG Emissions Reduction Target from shutting down an existing inefficient CHP facility. ORA notes that Carson would have to be a CHP facility in order for its termination to qualify. Carson has not have any useful thermal output since 2013, and ORA states it is unclear whether Carson met the definition of a CHP facility at the time of the shutdown. As directed in the Settlement, ORA recommends that SCE demonstrate that Carson met the federal definition of a CHP facility under 18 C.F.R. §292.205.

Secondly, ORA protests that SCE uses a Heat Rate that deviates from what is required by the CHP Program Settlement Agreement. According to this theory, SCE is seeking a different number of GHG Credits than that yielded by the calculations based on the Term Sheet value of 8,300 Btu/kWh. ORA recommends that if SCE cannot justify using a different heat rate, SCE should comply with the GHG Emission Accounting Methodology as defined in the Term Sheet.

#### SCE's Reply

SCE responded to ORA's protests on November 21, 2017. In their reply, SCE rebutted both of ORA's points.

On the first point, SCE asserts that Carson need not be a CHP facility to count the GHG Credits associated with the shut-down.

Carson was an inefficient CHP Facility that converted to 'utility controlled scheduled dispatchable generation facility,' i.e., a UPF. A UPF does not need to be a CHP Facility (i.e. a Qualifying Facility) and can be an Exempt Wholesale Generator.

SCE notes that UPFs are eligible to participate in CHP RFOs as a means of achieving its MW and GHG Targets as part of the Settlement, and thus concludes that as, "the Settlement clearly contemplates that the utilities can receive GHG

Credits from UPFs, which do not have to be a CHP facility, it should likewise allow the termination of inefficient UPF contracts to count," toward the target.

On the second point, SCE replies that ORA misapplied the Accounting Methodology of the Settlement Agreement Term Sheet. SCE writes that it first determined that Carson was "inefficient" compared to the Double Benchmark Heat Rate (8,300 Btu/kWh). It then applied Term Sheet Sections 7.3.1.4 and 7.3.1.4.2:

7.3.1.4 - Existing inefficient CHP Facility shuts down: Counts as a GHG Credit toward the CARB CHP RRM<sup>1</sup> of the IOU that previously contracted with the CHP;

7.3.1.4.2 - If the thermal need no longer exists, measurement is based on the Baseline year emissions minus the projected PPA emissions and emissions associated with replacing one hundred percent (100%) of the decreased electric generation at a *time differentiated Heat Rate*. The baseline year emissions are the average of the previous two (2) calendar years of operational data. The IOU shall demonstrate the thermal need no longer exists. (Emphasis Added.)

SCE thus concluded that it correctly applied the Accounting Methodology.

## **DISCUSSION**

On October 25, 2017, SCE filed Advice Letter 3681-E requesting Commission approval of a request for GHG credits associated with the Termination and Shut-Down Agreement between SCE and Carson.

In this Advice Letter, SCE requested that the Commission:

---

<sup>1</sup> CARB CHP Recommended Reduction Measure, from *Climate Change Scoping Plan: A Framework for Change*, 2008

1. Find that 1,488 MT of GHG emissions reductions associated with the Termination Agreement applies towards SCE's GHG Target.

Energy Division has reviewed the Advice Letter and the Protests and summarizes that SCE seeks GHG credits toward its CHP GHG Emissions Reduction Target from shutting down Carson Cogeneration Facility. We will first address whether Carson was considered a CHP facility at the time of the Termination Agreement and then address the Accounting Methodology used to determine the GHG credits from shutting Carson.

Carson's Status as a CHP Facility

Carson has not had any useful thermal output since 2013, when it became a UPF. SCE seeks credit pursuant to Section 7.3.1.4:

**7.3.1.4** Existing inefficient CHP Facility shuts down: Counts as a GHG Credit toward the CARB CHP RRM of the IOU that previously contracted with the CHP.

**7.3.1.4.1** (Omitted)

**7.3.1.4.2** If the thermal need no longer exists, measurement is based on the Baseline year emissions minus the projected PPA emissions and emissions associated with replacing one hundred percent (100%) of the decreased electric generation at a time differentiated Heat Rate. The baseline year emissions are the average of the previous two (2) calendar years of operational data. The IOU shall demonstrate the thermal need no longer exists.

In their comments, ORA recommended that the Commission require, "SCE demonstrates that Carson met the definition of a CHP facility at the time of the Termination Agreement." ORA also notes:

[F]ollowing the Qualifying Facility and Combined Heat and Power Program Settlement Agreement (CHP Settlement Agreement) approved by the Commission in Decision (D.) 10-12-035, the terms of the Power Purchase Agreement (PPA) between SCE and Carson were amended, and

under the amended terms Carson was no longer obligated to maintain its steam host, thus giving up its CHP capabilities. Carson has not served a thermal need since 2013.

As part of its analysis, ORA referenced the definition of CHP facility under the term sheet:

**CHP Facility or CHP Facilities:** A facility that meets the federal definition of a qualifying cogeneration facility under 18 C.F.R. §292.205.

ORA accordingly requested that “SCE demonstrate that Carson met the federal definition of a CHP facility at the time of the Termination Agreement,” in order to claim their requested GHG Credits.

In its reply, SCE references Section 4.2.2.2 of the Settlement Term Sheet, which allows for “CHP Facilities converting to Utility Prescheduled Facilities,” to bid into CHP RFOs, and that, “[t]here is thus no issue with UPF’s (i.e., former CHP Facilities) can be a means of achieving both the MW and GHG Targets.”

As Carson had been operating as a UPF, we must consider whether or not the Settlement intends to treat UPFs similarly to CHP facilities. It should be noted that in their reply, ORA fails to acknowledge the existence of UPFs in light of the Settlement. In reviewing the Settlement, the Commission finds that UPFs are treated largely in the same manner as CHPs. In fact, the definition of “State CHP Program or CHP Program,” reads: “The program established in this Settlement for CPUC-jurisdiction entities to procure from CHP Facilities and Utility Prescheduled Facilities.”

As additional textual evidence, Section 11.2.1 begins:

11.2.1 The Parties’ objective is to assure that a CHP or Utility Prescheduled Facility operating under an extension ordered by the Commission in D.07-09-040 will be able to deliver power without interruption pursuant to the extension of the Legacy CHP PPA[.]



The rest of the section makes no further mention of UPFs, but does continue to discuss CHP PPAs. It thus cannot be inferred that the omission of the term 'Utility Prescheduled Facility,' is intended to preclude UPFs unless otherwise specifically mentioned. References to "CHP Facilities or Utility Prescheduled Facilities," are littered throughout the Settlement. As the very definition of the Program includes UPFs, and as we can see that UPFs are not always explicitly included in the text, it is reasonable to conclude that Carson, as a UPF, need not be a CHP facility under the federal definition in 18 C.F.R. §292.205 to qualify for GHG credits under Section 7.3.1.4.2.

Discussion of Accounting Methodology

ORA additionally refuted the methodology SCE used to determine that the Termination Agreement contributes 1,488 MT of GHG credit (modified from the original request of 1,682 MT) towards their target. In their protest, ORA states that SCE used a heat rate different than the heat rate required by the Term Sheet, yielding a different number of GHG Credits than yielded by the calculations based on the Term Sheet value of 8,300 Btu/kWh. ORA does not point to a specific section of the Term Sheet to justify why SCE ought to use a value of 8,300 Btu/kWh, but merely states that they should. ORA additionally notes that SCE references section 7.3.1.4.2, which states:

If the thermal need no longer exists, measurement is based on the Baseline year emissions minus the projected PPA emissions and emissions associated with replacing one hundred percent (100%) of the decreased electric generation at a time differentiated Heat Rate. The baseline year emissions are the average of the previous two (2) calendar years of operational data. The IOU shall demonstrate the thermal need no longer exists. (Emphasis added)

ORA does not object to SCE using section 7.3.1.4.2 as the correct source to calculate the GHG credits available to Carson from shutting down.

In their reply, SCE claims that the "calculation of GHG Credits is performed based upon proper applicability of the [Time Differentiated Heat

Rate] as stated in Section 7.3.1.4.2.” In review, the Commission notes section 7.1 and 7.1.2:

## 7.1 GHG Accounting Principles

### 7.1.1 (Omitted)

7.1.2 Except otherwise noted in Section 7.3, the Parties agree to measure the amount of GHG emissions from CHP Facilities as compared to the current Double Benchmark in place at the time of PPA execution or, for a Utility Prescheduled Facility, execution of a new PPA or a Legacy PPA Amendment. [Remainder omitted]

As is in fact noted in section 7.3.1.4.2, when calculating the GHG Credits for Carson, an existing inefficient facility whose thermal need no longer exists, the measurement is performed using a time differentiated Heat Rate. The Commission is thus satisfied with SCE’s accounting methodology and approves SCE’s request for 1,488 MT of GHG reduction credits from the shutdown of the Carson facility.

## 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. No comments were filed on Resolution E-4925.

**FINDINGS**

1. Commission Decision 10-12-035 directed Southern California Edison to procure 1,402 MW of combined heat and power capacity and established 1.22 million metric tonnes GHG reduction target.
2. On October 25, 2017, Southern California Edison (SCE) filed Advice Letter (AL) 3681-E, modified by Supplemental 3681-A, seeking approval of 1,488 metric tonnes of GHG credit towards their reduction target.
3. Utility Prescheduled Facilities can be considered Combined Heat and Power Facilities in light of the Settlement.
4. The Carson facility, as a Utility Prescheduled Facility, is eligible to receive GHG reduction credits under the terms of the Settlement.
5. As stipulated in section 7.3.1.4.2 of the Settlement Term Sheet, SCE correctly used a time-differentiated Heat Rate to calculate the GHG reduction credits associated with the Carson Cogeneration Company Facility shutdown.

**THEREFORE IT IS ORDERED THAT:**

1. The request of Southern California Edison to claim GHG credits associated with permanently shutting down the Carson Cogeneration Company, LLC facility, as requested in Advice Letter 3681-E, is granted.

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 July 12, 2018; the following Commissioners voting favorably thereon:

---

ALICE STEBBINS  
Executive Director