Resolution E-4953. Southern California Edison’s request for greenhouse gas reduction credits from shut-down of Corona Energy Partners, Ltd. facility

PROPOSED OUTCOME:
- This Resolution grants Southern California Edison’s request to claim greenhouse gas reduction credits towards its Combined Heat and Power program abatement targets.

SAFETY CONSIDERATIONS:
- There is no impact on safety.

ESTIMATED COST:
- There is no cost impact.

By Advice Letter 3752-E, filed on February 27, 2018.

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 Corona Energy Partners, Ltd. (Corona), dated September 30, 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 (QF) 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 combined minimum of 3,000 MW of CHP and reduce GHG emissions consistent with the California Air Resources Board Scoping Plan, currently set at 4.8 million metric tons (MMT) by the end of 2020.

Sections 6 and 7 of the Settlement Term Sheet provide 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 Corona Generating Facility

SCE and Corona executed a Power Purchase Agreement (Legacy Contract) on May 31, 1985 for the procurement of energy and capacity from Corona for a 30-year term, set to expire on June 4, 2018. The CHP Settlement required that SCE offer its CHP contract counterparties the option to negotiate the terms of the pro
forma Power Purchase Agreement or amend an existing Legacy Contract. Corona and SCE entered into six Amendments to the existing Power Purchase Agreement.

The Corona Generating Facility (Facility) was a natural-gas fired CHP generating facility with a capacity of 42 MW located in Corona, California. Under the Legacy Contract, the Facility was required to serve the steam and electricity needs of a host entity to satisfy PURPA QF CHP requirements. As of the effective termination date, the Facility’s host entity has ceased all operations related to its previous role as a thermal host.

**Background on the Termination Agreement**

SCE and Corona executed the Termination Agreement on September 20, 2017, terminating the Contract nine months before the original term. SCE asserts it intends to seek approval for the Termination Agreement through its annual ERRA filing, and thus in AL-3752 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.

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

SCE calculated the Termination Agreement’s GHG credit pursuant to Section 7.3.1.4.2 of the Term Sheet, which states that:

> [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 7,727 MT of GHG Credit towards their target.
NOTICE

Notice of AL 3752-E was made by publication in the Commission’s Daily Calendar. SCE 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 3752-E was protested.

ORA’s Protest

SCE’s Advice Letter 3752-E was timely protested by the Office of Ratepayer Advocates (ORA), filed on March 19, 2018. In its protest, ORA raised two main issues:

- Whether SCE’s time differentiated Heat Rate (TDHR) used to calculate the GHG credits is consistent with the Commission approved methodology for calculating the TDHR.¹
- Whether SCE fully demonstrated that the Corona facility has no thermal need.

On the first point, ORA notes that SCE correctly used a time differentiated Heat Rate (TDHR) to calculate the appropriate GHG reductions credits. ORA also notes that SCE did not supply the methodology it used to calculate the TDHR and thus believes SCE must justify the methodology it used to calculate the TDHR.

Secondly, ORA protests that SCE provides no evidence of disconnection of the natural gas supply to Corona’s auxiliary boilers, which had been used to provide

¹ After the Commission approved Settlement with the issuance of Decision (D).10-12-035 on December 16, 2010, parties continued to work together on 'Parking Lot Issues,' including a definition of the TDHR. On February 12, 2012, Cem Turhal of Energy Division presented the agreed upon methodology to calculate the TDHR. It is this methodology ORA states that SCE must use.
steam to the host facility. ORA notes the existence of thermal need has implications for the GHG reduction credits received for closing operations at the facility.

**SCE’s Reply**

SCE responded to ORA’s protests on March 26, 2018. In their reply, SCE addressed both of ORA’s points.

On the first point, SCE asserts that it correctly calculated the GHG credits it is seeking by following agreed upon methodology for calculating the TDHR, and included that methodology in Appendix A of its reply. Notably, SCE did not include the actual calculations used to arrive at their number, but only provided the methodology.

On the second point, SCE asserts that “evidence that the thermal host is being dismantled is strong evidence that a thermal need no longer exists.” To provide additional evidence, SCE attached a letter from the Facility owner stating that the thermal need was discontinued on or before the effective date of the Termination.

**DISCUSSION**

On February 27, 2018, SCE filed Advice Letter 3752-E requesting Commission approval for GHG credits associated with the Termination and Shut-Down Agreement between SCE and Corona.

In this Advice Letter, SCE requested that the Commission:

1. Find that 7,727 MT of GHG emissions reductions associated with the Termination Agreement applies towards SCE’s GHG Target.

We will first address whether SCE correctly calculated the TDHR and then address whether SCE provided sufficient evidence that the thermal need no longer exists.
SCE’s Calculation of the Time Differentiated Heat Rate

In its protest, dated March 19, 2018, ORA notes that SCE correctly calculated that the Corona Facility was inefficient according to the Term Sheet, but that it did not provide the underlying calculations it used to determine the time differentiated Heat Rate (TDHR) used to calculate the GHG reduction credits sought in the advice letter.

In its reply on March 26, 2018, SCE asserts it used the methodology Settlement stakeholders discussed to identify the TDHR. SCE also provides a copy of the February 12, 2012 Energy Division presentation on how to calculate the TDHR, and further explains that the methodology it used is consistent with the agreed upon methodology (attached as Appendix A). SCE did not provide the actual numbers used in the calculation.

In a Data Request dated March 27, 2018, Energy Division staff requested the underlying data used in the calculations, as well as the calculations themselves, used to determine the TDHR in AL 3752-E. SCE provided the requested data on April 4, 2018. Upon review, Commission staff are satisfied that SCE correctly calculated the TDHR used to determine the GHG reductions in AL 3752. ORA’s first point of protest is thus satisfied.

Whether SCE Demonstrated that Corona has no Thermal Need

In its protest, ORA notes that “the existence of thermal need has implications for which subsection of the Term Sheet governs the method needed to calculate GHG reduction credits.” ORA consequently requests SCE provide clear evidence supporting the assertion that the facility no longer had a thermal need.

In reply, SCE notes that AL 3752-E states that not only was the natural gas supply for the facility disconnected, but that the facility itself was in the process of being dismantled and demolished. SCE provided as an attachment a letter dated March 21, 2018 from Corona Energy Partners Limited attesting that the new owner of the site was at that time in the process of demolishing the structure ‘to grade level.’
Upon review, Commission staff find the demolition of the facility to be sufficient proof that the thermal need no longer exists and that ORA’s second point of protest is adequately addressed.

The Commission is thus satisfied with SCE’s accounting methodology and proof that the thermal need no longer exists. The Commission approves SCE’s request for 7,727 MT of GHG reduction credits from the shutdown of the Corona 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 parties submitted any comments.

**FINDINGS**

1. Commission Decision 10-12-035 directed SCE to procure 1,402 MW of combined heat and power capacity and established 1.22 MMT GHG reduction target.
2. On March 26, 2018, Southern California Edison (SCE) filed Advice Letter (AL) 33752-E, seeking approval of 7,727 MT of GHG credit towards their reduction target.
3. SCE correctly calculated the time differentiated Heat Rate (TDHR) as directed by Energy Division guidance from Cem Turhal’s February 12, 2012 presentation.
4. The thermal need for the Corona Energy Partners, Ltd facility no longer exists.
THEREFORE IT IS ORDERED THAT:

1. The request of Southern California Edison to claim GHG credits associated with permanently shutting down the Corona Energy Partners, Ltd facility, as requested in Advice Letter 3752-E, is approved.

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 October 11, 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
APPENDIX A
CHP Settlement Counting Principles

1. Time differentiated heat rates to plug into the replacement energy calculation.
For the Time Differentiated Heat Rate (TDHR) to use to calculate the GHG reduction for "replacing one hundred percent (100%) of the decreased electric generation at a time differentiated Heat Rate", each IOU will use its averaged "Market Heat Rate" (MHR) component of the 2010 and 2011 SRAC calculations as time differentiated by each IOU’s existing, most recent TOU rates in SRAC. The average MHRs are:

<table>
<thead>
<tr>
<th>Utility</th>
<th>BTU/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E</td>
<td>6,794</td>
</tr>
<tr>
<td>SCE</td>
<td>7,196</td>
</tr>
<tr>
<td>SDG&amp;E</td>
<td>7,155</td>
</tr>
</tbody>
</table>

The “TOD Adjusted Heat Rate” is the product of the IOU’s average MHR and the TOD Factor. The TDHR will be the average of the TOD Adjusted Heat Rate weighted by the replacement energy assumption for that TOU period. Historical deliveries for each TOU period will be based on i) if available, actual deliveries by TOU period, or ii) otherwise, the assumption that deliveries occurred in the highest heat rate periods up to the total historical deliveries. Consistent with the Termsheet, the average of the deliveries from the two most recent calendar years (either by TOU period or total) will be used. Expected deliveries will be assigned to the highest heat rate periods up to the total project deliveries. The replacement electricity will be the difference of the two by TOU period.

In the example below, given an average MHR of 7025 Btu/kWh and the TOU rates in the column d, the heat rates per TOD period will be in column e. Column h shows when and how much replacement energy would be required. The time differentiated heat rate, in this example, would be 8070 Btu/kWh.

<table>
<thead>
<tr>
<th>TOD Period</th>
<th># Hrs (b)</th>
<th>Avg HR (Btu/kWh) (c)</th>
<th>TOD Factor (d) (e)</th>
<th>TOD Adj HR (Btu/kWh) (f)</th>
<th>Historical Deliveries (MWh) (g)</th>
<th>Expected Deliveries (MWh) (h)</th>
<th>Replacement Energy Required (MWh) (i)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Mid-Peak</td>
<td>2,165</td>
<td>7,025</td>
<td>1.2165</td>
<td>8,550</td>
<td>50000</td>
<td>10000</td>
<td>40000</td>
</tr>
<tr>
<td>Winter Off-Peak</td>
<td>2,190</td>
<td>7,025</td>
<td>1.012</td>
<td>7,109</td>
<td>10000</td>
<td>10000</td>
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<tr>
<td>Winter Super-Off-Peak</td>
<td>1,460</td>
<td>7,025</td>
<td>0.776</td>
<td>5,451</td>
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<td>Summer On-Peak</td>
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<td>7,025</td>
<td>1.4251</td>
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<td>30000</td>
<td>0</td>
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<tr>
<td>Summer Mid-Peak</td>
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<td>1.0069</td>
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<td>10000</td>
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<tr>
<td>Summer Off-Peak</td>
<td>1,545</td>
<td>7,025</td>
<td>0.8526</td>
<td>5,900</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

TDHR: 8070

2 Settlement Agreement 7.3.1.3 & 7.3.1.4.2
CHP Reporting Template Presentation

Cem Turhal
California Public Utilities Commission
Energy Division
February 10, 2012
3. MW and GHG Accounting Data - Confidential

- The last column of the MW and GHG accounting table is the Time Differentiated Heat Rate column. To make things simpler please divide the HR by 1000 when entering into the model (e.g., 7500 HR = 7.5 in the model).

- For the Time Differentiated Heat Rate (TDHR), used to calculate the GHGs associated with facilities that shut down or convert to UPF, each IOU will use its averaged “Market Heat Rate” (MHR) component of the 2010 and 2011 SRAC calculations as time differentiated by each IOU’s existing, most recent TOU rates in SRAC. The average MHRs are:

<table>
<thead>
<tr>
<th>GHG Counting: Time Differentiated Heat Rate</th>
<th>Average MHR-2010 &amp; 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td>BTU/kWh</td>
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- The “TOD Adjusted Heat Rate” is the product of the IOU’s average MHR and the TOD Factor. The TDHR will be the average of the TOD Adjusted Heat Rate weighted by the replacement energy assumption for that TOU period.

The CHP Reporting Template Presentation, inclusive of this slide, is a public document. The word “Confidential” in the title of this slide refers to the confidential nature of MW and GHG accounting data for purposes of filings, and not to the slide itself.