

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

ENERGY DIVISION

**RESOLUTION E-4682**  
**February 26, 2015**

**REDACTED**  
**RESOLUTION**

Resolution E-4682. Southern California Edison Company (SCE) seeks approval of an agreement with Elk Hills Power executed during the 2013 Combined Heat and Power Request For Offers.

PROPOSED OUTCOME:

- Approve without modification the agreements between SCE and Elk Hills Power pursuant to the terms of the Combined Heat and Power Program Settlement Agreement.

SAFETY CONSIDERATIONS:

- This resolution approves a power purchase agreement for a CHP Facility that, based on information before the Commission, has been previously operated safely and is obligated to do so consistent with prudent practices.

ESTIMATED COST:

- Actual costs are confidential at this time.

By Advice Letter 3053-E Filed on June 12, 2014.

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**SUMMARY**

This Resolution approves a materially-modified Combined Heat and Power Request for Offers (CHP RFO) Pro Forma Power Purchase Agreement (PPA) that Southern California Edison Company (SCE) executed with Elk Hills Power (Elk Hills) for energy and capacity from its 550 MW existing cogeneration facility as a result of SCE's 2013 CHP RFO.

Under the new CHP RFO PPA, the combined cycle gas turbine facility will offer a portion of its output to SCE as firm capacity and energy for 5 years. The Resolution finds that SCE payments under the Agreement and the Letter Agreement are reasonable and that the payments shall be recovered in rates. This

Resolution accepts SCE's request to count a total of 200 MW and 57,006 MT toward SCE's MW and GHG Targets under Commission Decision (D.) 10-12-035.

## **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 with the issuance of 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 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.

The Commission defined several procurement processes for the IOUs within the Settlement. Per Section 4.2.1, the Commission directs the three IOUs to conduct Requests for Offers (RFOs) exclusively for CHP resources as a means of achieving the MW Targets and GHG Emissions Reduction Targets. The Settlement Term Sheet establishes terms and conditions regarding eligibility, contract length, pricing, evaluation and selection and other terms and conditions of the RFOs. The maximum contract term for new facilities selected in an RFO is twelve (12) years, while the maximum term for existing facilities is seven (7) years.<sup>1</sup>

### *Background on AL 3053-E*

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<sup>1</sup> Settlement Term Sheet p. 13, Section 4.2.3

Currently, Elk Hills Facility is a 550 MW combined cycle gas turbine cogeneration facility located in Tupman, CA that provides steam and electricity to Occidental of Elk Hills, Inc. for use in natural gas processing and purification. Elk Hills' electrical output will serve Occidental's electrical demand, be exported to the CAISO controlled grid (which SCE will maintain the first right of purchase to up to the 200 MW of contract capacity), and may also be sold to the CAISO energy market.

Elk Hills began operations as a generation facility July 1, 2003. On March 1, 2012 Elk Hills filed for self-certification as a Qualifying Facility with FERC and stated that it was not intending to sell its output under Section 210 of the Public Utilities Regulatory Policies Act of 1978. On December 4, 2012, Elk Hills sought FERC's determination on the facility's compliance with the Fundamental Use Test in order to become eligible to participate in the CHP RFOs as required by Settlement Term Sheet Section 4.2.2.1. On February 26, 2013, FERC issued an order that found Elk Hills as compliant with the requirements of the Fundamental Use Test.<sup>2</sup> Since Elk Hills did not begin operations as a cogenerator until after the November 23, 2011 Settlement Effective Date, it is considered a New CHP Facility in the CHP Program.

SCE requests that the CPUC find that the executed agreement will count 200 MW of capacity toward the MW Target and 57,006 MT toward the GHG Target.

### **NOTICE**

Notice of ALs 3053-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 3053-E was not protested.

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<sup>2</sup> 142 FERC 62,156 at 4.

## **DISCUSSION**

On June 12, 2014, SCE filed Advice Letter AL 3053-E which requests Commission approval of a PPA with Elk Hills Power.

Specifically, SCE requested that the Commission:

1. Approve the Agreement in its entirety;
2. Find that the Agreement, and SCE's entry into the Agreement is reasonable and prudent for all purposes, subject to further review with respect to the reasonableness of SCE's administration of the Agreement;
3. Apply the 200 MW associated with the Agreement toward SCE's Settlement MW procurement Target of 1,402 MW of CHP capacity;
4. Apply the 57,006 MT associated with the Agreement toward SCE's GHG Emissions Reductions Target;
5. Find that the Agreement is automatically compliant with the Emissions Performance Standard;
6. Find that the costs of the Agreement shall be recovered through SCE's Cost Allocation Mechanism;

**Energy Division evaluated the agreement based on the following criteria:**

- Consistency with D.10-12-035, which approved the QF/CHP Program Settlement including:
  - Consistency with Definition of CHP Facility and Qualifying Cogeneration Facility
  - Consistency with MW Counting Rules
  - Consistency with GHG Accounting Methodology
  - Consistency with Cost Recovery Requirements
- 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 Procurement Review Group (PRG) participation

In considering these factors, Energy Division also considers the analysis and recommendations of an Independent Evaluator as is required for the CHP RFOs per Section 4.2.5.7 of the Settlement Term Sheet.<sup>3</sup>

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

On December 16, 2010, the Commission adopted the QF/CHP Program Settlement with the issuance of D.10-12-035. The Settlement Term Sheet establishes criteria for contracts with Facilities including:

*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, establishes efficiency standards for bottoming-cycle facilities, and, for certain new facilities, mandates compliance with a fundamental use test.

As stated in Section 1.02(a) of the CHP PPA, Elk Hills is a New CHP Facility, which means that it: is a Qualifying Cogeneration Facility<sup>4</sup>; meets the definition of “cogeneration” under the Public Utilities Code Section 216.6; and satisfies the

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<sup>3</sup> Per Settlement Term Sheet 4.2.5.7: “Each IOU shall use an Independent Evaluator (IE) similar to that used in other IOU RFO processes. It is preferable that the IE have CHP expertise and financial modeling experience.”

<sup>4</sup> Exhibit A of the CHP RFO Pro Forma PPA defines “Qualifying Cogeneration Facility” as a generating facility that: (a) complies with 18 C.F.R. § 292.203 et seq. and (b) has filed with FERC either (i) an application for FERC certification pursuant to 18 C.F.R. § 202.207(b)(1) or (ii) a notice of self-certification pursuant to 18 C.F.R. § 292.207(a). As stated above, FERC determined that Elk Hills complies with the Fundamental Use Test required for New CHP QFs.

GHG Emissions Performance Standards set forth in Public Utilities Code Section 8341.

The Elk Hills Power CHP Facility meets the definition of a CHP Facility and Qualifying Cogeneration Facility, consistent with the eligibility requirements of the QF/CHP Settlement.

*Consistency with Settlement MW Counting Rules*

As a New CHP Facility, Elk Hills is subject to the rule in Section 5.2.5 of the Settlement Term Sheet in which a Capacity Demonstration Test is used to calculate eligible MWs. However, SCE states that counting the entire capacity would be inappropriate since it is not the sole purchaser of Elk Hills' electricity. While there is no counting rule for this scenario, SCE looks for guidance to Section 5.2.4.1 of the Settlement Term Sheet, which, in cases where multiple utilities purchase power from a single facility, directs the utility to count only the portion of a facility's capacity purchased by that utility toward the MW Target. SCE's approach is a reasonably conservative application of Section 5.2.4.1 of the Settlement Term Sheet to a New CHP Facility.

The 200 MW of Elk Hills' capacity that is procured by SCE will count toward SCE's MW Target.

*Consistency with Settlement Greenhouse Gas Accounting Methodology*

Per Section 7.3.1.1 of the Settlement Term Sheet, the anticipated operations of an Efficient New CHP Facility is compared against the Double Benchmark defined in Section 7.2 of the Term Sheet. This calculates the GHG Credit gained from the efficiencies of CHP operation as compared to separate heat and power generation.<sup>5</sup>

Per 7.3.1.1 of the Settlement Term Sheet, SCE calculated that Elk Hills' operations would result in a GHG Credit of 57,006 MT toward the Emissions Reduction Target. This is appropriately reflected in the Advice Letter.

Additional information about the GHG emissions accounting is included in the Confidential Appendix A.

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<sup>5</sup> Electric generation heat rate of 8,300 BTU/kWh HHV and 80% boiler efficiency

Elk Hills' operations under the CHP PPA will yield a GHG Credit of 57,006 MT toward the GHG Emissions Reduction Target.

### **Need for Procurement**

SCE's total MW procurement goal for the CHP Program is 1,402 MW, with 378 MW allocated to Target B. A procurement shortfall from CHP FRO 1 resulted in a Net MW Target B of 392 MW. SCE's 2020 GHG Emissions Reduction Target is 2.15 MMT.

The execution of the Elk Hills PPA contributes 200 MW to SCE's need to procure additional CHP resources to meet the remaining MW Target. The facility's efficiency compared to the Double Benchmark contributes 57,006 MT to the GHG Target.

The need for procurement of the Elk Hills PPA is justified based on SCE's remaining need to procure capacity and emissions reductions pursuant to the CHP/QF Settlement.

### **Cost Reasonableness**

Detailed explanations of the contract costs and material modifications are in Confidential Appendix A.

The cost associated with the Elk Hills CHP PPA is just and reasonable.

### **Cost Recovery**

In D. 10-12-035, the Commission determined that the utilities should procure CHP resources on behalf of non-IOU load-serving entities and allocate the net capacity costs and associated benefits to those entities.<sup>6</sup> In AL 3053-E, SCE requests to recover the costs of the Agreement through the Cost Allocation Mechanism.

On January 17, 2012, the Commission made effective SCE AL 2645-E as of November 23, 2011, which authorized SCE to revise its New System Generation Balancing Account to recover the net capacity costs of CHP contracts as it was directed by D.10-12-035.

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<sup>6</sup> D. 10-12-035, p. 56 and Settlement Term Sheet Section 13.1.2.2

SCE is authorized to recover costs in accordance with Section 13.1.2.2 of the Settlement Term Sheet and AL 2645-E, consistent with the directives of the QF/CHP Settlement.

### **Public Safety**

California Public Utilities Code Section 451 requires that every public utility maintain adequate, efficient, just, and reasonable service, instrumentalities, equipment and facilities to ensure the safety, health, and comfort of the public.

Based on the information before the Commission, the facility will not change operations. The PPA requires Elk Hills to operate the existing generation facilities in accordance with Prudent Electrical Practices. This requirement includes a number of provisions to ensure that the generating facility is operated safely and reliably, including ensuring sufficient staff, maintenance, monitoring and testing, etc.

In addition, Energy Division requested information from SCE on any safety violations found at the facilities according to government, industry-based, or internal standards or requirements. SCE states that Elk Hills has no reported violations since their initial operation date.

The Elk Hills PPA includes safeguards and requirements to ensure that the operation of the new and existing generating facilities will not result in any adverse safety impacts to the public or the CHP facilities' employees.

### **Project Viability**

While Elk Hills is a New Qualifying Cogeneration Facility as defined in the Settlement Term Sheet, it previously operated as an electric generation facility and in 2013 received FERC QF certification that it is compliant with the Fundamental Use Test for new facilities. Given this operational history, the project faces minimal project development risk.

Elk Hills has a long operating history as an electric generation facility, has been certified by FERC as compliant with the requirements for new qualifying facilities and is therefore a viable project.

### **Consistency with the Emissions Performance Standard**

California Public Utilities Code Sections 8340 and 8341 require that the Commission consider emissions costs associated with new long-term (five years or greater) power contracts procured on behalf of California ratepayers.



D.07-01-039 adopted an interim Emissions Performance Standard (“EPS”) that establishes an emission rate for obligated facilities to levels no greater than the greenhouse gas emissions of a combined-cycle gas turbine power plant. Pursuant to Section 4.10.4.1 of the CHP Program Settlement Term Sheet, for PPAs greater than five years that are submitted to the CPUC in a Tier 2 or Tier 3 advice letter, the Commission must make a specific finding that the PPA is compliant with the EPS.

The EPS applies to all energy contracts that are at least five years in duration for baseload generation, which is defined as a power plant that is designed and intended to provide electricity at an Annualized Plant Capacity Factor greater than 60 percent.

Under the CHP PPA, Elk will operate for 5 years during the terms noted above. Therefore this procurement qualifies as a “long term financial commitment” per D.07-01-039. The EPS applies to the generating units because the facility’s capacity factor exceeds 60%. However, because Elk Hills uses combined-cycle gas turbines that were in operation as of the January 25, 2007 effective date of the EPS Decision, it is automatically EPS compliant.

Elk Hills Power is automatically compliant with the Emissions Performance Standard as its combined cycle gas turbines were operational on the effective date of D.07-01-039.

**Consistent with D.02-08-071 and D.07-12-052, PG&E’s Procurement Review Group (“PRG”) and Cost Allocation Mechanism (“CAM”) Group were notified of the CHP PPA.**

SCE presented information about the proposed Elk Hills PPA to its PRG and CAM groups on March 26, 2014. SCE postponed the close of the RFO by two weeks to resolve the concerns of the groups. SCE presented successful offers to the groups on April 8 and 10, respectively.

SCE has complied with the Commission’s rules for involving the PRG and CAM groups.

### **Independent Evaluator Review**

Pursuant to Section 4.2.5.7 of the Settlement Term Sheet, SCE retained independent evaluator Merrimack Energy to monitor and evaluate the integrity of its CHP RFO process and submitted the independent evaluator’s report as an appendix to AL 3053-E. The IE concurs with SCE’s selection of the facility.

SCE has complied with the Commission's rules for review of the CHP RFO by an independent evaluator.

## **COMMENTS**

This is an uncontested matter in which the resolution grants the relief requested. Accordingly, pursuant to PU Code 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived.

## **FINDINGS**

1. Commission Decision 10-12-035 directed Southern California Edison (SCE) to procure 1,402 megawatts (MW) of combined heat and power (CHP) capacity by November 2015 and 2.17 million metric tons of greenhouse gas reductions (GHG) from CHP contracts by 2020.
2. On July 12, 2014, SCE filed Advice Letter (AL) 3053-E, seeking approval of a modified CHP Request for Offers Pro Forma power purchase agreement (PPA) with Elk Hills Power (Elk Hills), a 550 MW New CHP Facility, for firm energy and capacity.
3. The 200 MW of Elk Hills' capacity that is procured by SCE will count toward SCE's MW Target.
4. Elk Hills' operations under the CHP PPA will yield a GHG Credit of 57,006 MT toward the GHG Emissions Reduction Target.
5. The cost associated with the Elk Hills CHP PPA is just and reasonable.
6. The Elk Hills PPA includes safeguards and requirements to ensure that the operation of the new and existing generating facilities will not result in any adverse safety impacts to the public or the CHP facilities' employees.
7. SCE is authorized to recover costs of the Elk Hills CHP PPA in accordance with Section 13.1.2.2 of the Settlement Term Sheet and AL 2645-E, consistent with the directives of the QF/CHP Settlement.
8. Elk Hills Power is automatically compliant with the Emissions Performance Standard as its combined cycle gas turbines were operational on the effective date of D.07-01-039.
9. In its execution of the Elk Hills Power PPA, SCE has complied with the Commission's requirements for consultation with the Procurement Review Group, Cost Allocation Mechanism Group, and Independent Evaluator.

**THEREFORE IT IS ORDERED THAT:**

1. The request of Southern California Edison Company for authority to execute the modified Combined Heat and Power Request for Offers Pro Forma Power Purchase Agreement with Elk Hills Power, LLC and to recover costs via the cost allocation mechanism as proposed in AL 3053-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 February 26, 2015; the following Commissioners voting favorably thereon:

/s/ TIMOTHY J. SULLIVAN  
TIMOTHY J. SULLIVAN  
Executive Director

MICHAEL PICKER  
President  
MICHEL PETER FLORIO  
CATHERINE J.K. SANDOVAL  
CARLA J. PETERMAN  
LIANE M. RANDOLPH  
Commissioners

## **Confidential Appendix A**

### Summary and Analysis of the Agreements with Elk Hills Power

REDACTED