

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

**ENERGY DIVISION**

**RESOLUTION E-4681  
February 26, 2015**

**REDACTED**  
**RESOLUTION**

Resolution E-4681. Southern California Edison (SCE) seeks approval of agreements with Berry Petroleum, U.S. Borax, New-Indy Ontario and Oxnard executed during the 2013 Combined Heat and Power Request for Offers.

**PROPOSED OUTCOME:**

- Approve without modification the agreements between SCE and Berry Petroleum, U.S. Borax, New-Indy Ontario, and New Indy Oxnard pursuant to the terms of the Combined Heat and Power Program Settlement Agreement.

**SAFETY CONSIDERATIONS:**

- This resolution approves power purchase agreements for existing CHP facilities that will not undergo changes to facility operations, which, based on information before the Commission, are consistent with prudent practices.

**ESTIMATED COST:**

- Actual costs are confidential at this time.

By Advice Letter 3051-E Filed on June 9, 2014 and Advice Letters 3056-E and 3057-E Filed on June 17, 2014.

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**SUMMARY**

This Resolution approves immaterialy-modified Combined Heat and Power Request for Offers (CHP RFO) Pro Forma Power Purchase Agreements (PPA) that Southern California Edison Company (SCE) executed with Berry Petroleum (Berry), U.S. Borax (Borax), New-Indy Ontario (Ontario), and New-Indy Oxnard

(Oxnard) for energy and capacity from four existing cogeneration facilities. These offers were received through SCE’s 2013 CHP RFO.

Project	City, CA	Contract MW	Technology	Advice Letter	File Date
Berry	Taft	38	Gas-Fired Topping Cycle Cogeneration	3051-E	June 9, 2014
Borax	Boron	Up to 30		3053-E	June 17, 2014
Ontario	Ontario	37		3057-E	
Oxnard	Oxnard	14			

Under the new CHP RFO PPAs, the four gas-fired topping cycle cogeneration facilities will not undergo operational changes.

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 148.26 MW toward SCE’s MW 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 Advice Letters

The Borax, Oxnard, and Ontario facilities have previously sold electricity to SCE, while Berry’s previous contract was with Pacific Gas and Electric. The CHP RFO Pro Forma PPAs are intended to replace their existing contracts.

Project	Thermal Host	Operations	Agreement Type
Berry	Enhanced Oil Recovery	Firm & As-Avail.	Immaterially-modified CHP RFO Pro Forma Power Purchase Agreement
Borax	Mine and Refinery	As-Available	
Ontario	Containerboard		
Oxnard			

The CHP facilities will maintain their existing operations and thus be considered as GHG Neutral under the Settlement’s GHG Target. SCE requests that the CPUC find that the executed agreements will count the following CHP capacity toward the MW Target.

Project	MW Target Contribution
Berry	37.2
Borax	45
Ontario	41.06
Oxnard	25

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

## **NOTICE**

Notices of ALs 3051-E, 3056-E, and 3057-E were 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 Letters 3051-E, 3056-E, and 3057-E were not protested.

## **DISCUSSION**

On June 9, 2014, SCE filed Advice Letter AL 3051-E which requests Commission approval of a PPA with Berry Petroleum.

On June 17, 2014, SCE filed Advice Letter AL 3056-E which requests Commission approval of a PPA with U.S. Borax.

On June 17, 2014, SCE filed Advice Letter AL 3057-E which requests Commission approval of PPAs with New-Indy Oxnard and New-Indy Ontario.

Specifically for each Advice Letter, 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 "Contract Nameplate" MW associated with the Agreement toward SCE's Settlement MW procurement Target of 1,402 MW of CHP capacity;
4. Find that the Agreement is compliant with the Emissions Performance Standard;
5. Find that the costs of the Agreement shall be recovered through SCE's Cost Allocation Mechanism;
6. Find that the Agreement counts as Neutral toward the GHG Emissions Reduction Target.

**Energy Division evaluated the four agreements 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>2</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:

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<sup>2</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."

*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 PPAs, the four facilities are Existing CHP Facilities, which means that it: is a Qualifying Cogeneration Facility<sup>3</sup>; meets the definition of “cogeneration” under the Public Utilities Code Section 216.6; and satisfies the GHG Emissions Performance Standards set forth in Public Utilities Code Section 8341. The efficiency and emissions requirements of the facilities pursuant to these definitions are enumerated in the Confidential Appendix A of this Resolution.

The Berry, Borax, Oxnard, and Ontario CHP Facilities meet 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*

Per Settlement Term Sheet Section 5.2.3.1, the four facilities are Existing CHP Facilities. Each is a gas-fired Topping Cycle CHP Facility that exported and delivered electric power as indicated below per the respective utilities’ July 2010 Qualifying Facilities Semi-Annual Status Report. The MWs counted for the CHP RFO PPA executed with the facilities will be the published Contract Nameplate values indicated below. This is appropriately reflected in the Advice Letters.

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<sup>3</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).

Project	IOU	Log Number / QFID	Contract Nameplate MWs
Berry	PG&E	25C099EO2	37.2
Borax	SCE	2019	45.0
Ontario		2045	41.06
Oxnard		2055	25.0

The total 148.26 MW Contract Nameplate values for the Berry, Borax, Oxnard, and Ontario facilities will count toward SCE’s MW procurement target.

*Consistency with Settlement Greenhouse Gas Accounting Methodology*

As an efficient Existing CHP Facility, the execution of the four agreements meets several Policy Objectives<sup>4</sup> of the CHP Program regarding the continued operation of existing CHPs and the maintenance of existing GHG emissions reduction benefits.

The execution of the Berry, Borax, Ontario, and Oxnard CHP PPAs meet the Policy Objectives of the CHP Program by continuing the operation of an existing efficient CHP facility and maintaining GHG emissions reduction benefits.

Per Settlement Term Sheet Section 7.3.3.1, an Existing CHP Facility with no change in operations, regardless of contract status, is considered neutral for GHG accounting purposes. The four facilities will not change operations as a result of their CHP PPAs with SCE. Therefore the PPA will not count toward the QF/CHP Settlement greenhouse gas (“GHG”) Emissions Reduction Target. This is appropriately reflected in the Advice Letters.

Berry, Borax, Ontario, and Oxnard will not change operations and pursuant the Settlement will be counted as Neutral toward the QF/CHP Settlement greenhouse gas (“GHG”) Emissions Reduction Target.

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<sup>4</sup> As defined in Sections 1.2.1.3, 1.2.2.2, 1.2.2.7, and 1.2.6.1 of the Settlement Term Sheet.

### **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 RFO 1 resulted in a Net MW Target B of 392 MW for solicitation during CHP RFO 2. SCE's 2020 GHG Emissions Reduction Target is 2.15 MMT.

#### *Existing CHP Facilities in the July 2010 Semi-Annual Report*

The four CHP PPAs contribute a total of 148.26 MW and count as Neutral toward the GHG Emissions Reduction Targets ("ERT"), as it is an eligible Procurement Process listed in Section 4 of the Settlement Term Sheet. The four existing facilities sold to SCE or PG&E as reported in the respective IOUs' Qualifying Facilities Semi-Annual Status Report from July 2010.

Per Settlement Term Sheet Sections 6.4.2.2 and 6.4.2.3, the Existing CHP Facilities that shut down during the Initial Program Period ending November 23, 2015 will have their previous two years of GHG emissions evaluated against the Double Benchmark. This evaluation will determine if the cessation of the Facility's operations will add to the three IOUs' total GHG ERT as a "shortfall" or subtract from it as a "surplus." The terms of these CHP PPAs follow:

Project	Start	End
Berry	July 1, 2015	June 30, 2022
Borax	July 1, 2015	June 30, 2022
Ontario	January 1, 2016	December 31, 2022
Oxnard	April 1, 2016	March 31, 2023

Because each ends after the Initial Program Period, the GHG emissions neutrality associated with these Existing CHP Facilities will not be calculated in the net of the GHG Debit or Credit to the IOUs' Emissions Reduction Target.

The execution of the CHP PPAs contributes 148.26 MW to SCE's need to procure additional CHP resources to meet the remaining MW Target. The term of the PPA helps ensure that the Existing CHP Facilities will not cease operations during the Initial Program Period and therefore will not change the GHG Targets.

SCE's procurement of the Berry, Borax, Ontario and Oxnard PPAs is justified by the contribution to meeting SCE's remaining capacity need in the CHP/QF Settlement.

### **Cost Reasonableness**

A detailed explanation of the contract costs are in Confidential Appendix A.

The costs associated with the Berry, Borax, Ontario, and Oxnard CHP PPAs are 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>5</sup> In AL 3051-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.

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 four facilities will not change operations. The PPAs requires Berry, Borax, Ontario, and Oxnard to operate the existing generation facilities in accordance with Prudent Electrical Practices. This requirement includes a number of provisions to ensure that the

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<sup>5</sup> D. 10-12-035, p. 56 and Settlement Term Sheet Section 13.1.2.2

generating facilities are 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. Summarized below, Energy Division assessed that the prior violations do not pose or indicate a level of risk to the public sufficient to reject the approval of the agreements.

Project	Violation (Quantity, Applicable Code)	Status
Berry	None known over previous 10 years	N/A
Borax	(6) MSHA 30 CFR 56 <sup>6</sup>	All Corrected
Oxnard	(1) OSHA <sup>7</sup>	Appealed
Ontario	None known	N/A

The Berry, Borax, Ontario, and Oxnard PPAs include safeguards and requirements to ensure that the operation of the existing generating facilities will not result in any adverse safety impacts to the public or the CHP facilities' employees.

### **Project Viability**

The four facilities are each an Existing Qualifying Cogeneration Facility as defined in the Settlement Term Sheet and CHP RFO Pro-Forma PPA. Each has operated since the 1980s, providing steam to the thermal hosts noted above. As existing QFs, the projects face minimal project development risk.

The Berry, Borax, Ontario, and Oxnard Existing CHP Facilities have a long operating history and therefore are viable projects.

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

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<sup>6</sup> Mine Safety and Health Administration, Code of Federal Regulations Title 30 Part 56

<sup>7</sup> Occupational Safety and Health Administration

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 PPAs, the four facilities will operate for seven 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 each facility’s capacity factor exceeds 60%. As they are not combined-cycle gas turbines, they are not automatically EPS compliant. SCE has determined that each unit’s emissions factor is less than 1,100 lbs. CO<sub>2</sub>/MWh.

Each of the four CHP PPAs are subject to the EPS under D.07-01-039 because the term of the PPAs are greater than five years. The EPS applies to the generating units at Berry, Borax, Ontario and Oxnard, whose annualized plant capacity factors are greater than 60%. Based on data provided by SCE, the generating units are EPS compliant with an emissions factor of less than 1,100 lbs. CO<sub>2</sub>/MWh.

**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 Berry CHP 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 3051-E. The IE concurs with SCE's selection of the four facilities.

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 9, 2014, SCE filed Advice Letter (AL) 3051-E, seeking approval of a CHP Request for Offers Pro Forma power purchase agreement (PPA) with Berry Petroleum Company (Berry), an existing 38 MW CHP facility, for firm and as-available energy and capacity.
3. On July 17, 2014, SCE filed Advice Letter (AL) 3056-E, seeking approval of a CHP Request for Offers Pro Forma power purchase agreement (PPA) with U.S. Borax, LLC (Borax), an existing 45 MW CHP facility, for as-available energy and capacity.
4. On July 17, 2014, SCE filed Advice Letter (AL) 3057-E, seeking approval of CHP Request for Offers Pro Forma power purchase agreements (PPA) with New-Indy Ontario, LLC (Ontario), an existing 41.06 MW CHP facility, and New-Indy Oxnard, LLC (Oxnard), an existing 25 MW CHP facility, for as-available energy and capacity.
5. The total 148.26 MW Contract Nameplate values for the Berry, Borax, Oxnard, and Ontario facilities will count toward SCE's MW procurement target.

6. Berry, Borax, Ontario, and Oxnard will not change operations and pursuant the Settlement will be counted as Neutral toward the QF/CHP Settlement greenhouse gas ("GHG") Emissions Reduction Target.
7. The costs of the Berry, Borax, Ontario, and Oxnard CHP PPAs are reasonable.
8. The CHP PPAs with Berry, Borax, Ontario, and Oxnard include safeguards to ensure that the operation of the existing generating facilities will not result in any adverse safety impacts to the public or their employees.
9. SCE is authorized to recover costs of the four agreements 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.
10. Based on data provided by SCE, the four generating units are EPS compliant, each with an emissions factor of less than 1,100 lbs. CO<sub>2</sub>/MWh.
11. In its execution of the CHP PPAs with Berry, Borax, Ontario, and Oxnard, 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 Combined Heat and Power Request for Offers Pro Forma Power Purchase Agreement with Berry Petroleum Company, LLC and to recover costs via the cost allocation mechanism as proposed in AL 3051-E is approved.
2. The request of Southern California Edison Company for authority to execute the Combined Heat and Power Request for Offers Pro Forma Power Purchase Agreement with U.S. Borax Inc. and to recover costs via the cost allocation mechanism as proposed in AL 3056-E is approved.
3. The request of Southern California Edison Company for authority to execute the Combined Heat and Power Request for Offers Pro Forma Power Purchase Agreement with New-Indy Ontario, LLC and New-Indy Oxnard, LLC and to recover costs via the cost allocation mechanism as proposed in AL 3057-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

Berry Petroleum University  
U.S. Borax  
New-Indy Ontario  
New-Indy Oxnard

**[REDACTED]**