## Re Support of the Cogeneration Association of California to Energy Division's Draft Resolution E-4555 Addressing Southern California Edison Company's Advice Letter 2784 - Sycamore Cogeneration Company ${ }^{1}$

## I. Introduction

The Cogeneration Association of California (CAC) supports the conclusion in the draft Resolution approving the adoption of four Sycamore-SCE contracts and two amendments under the CPUC QF/CHP Program Settlement. ${ }^{2}$ CAC's comments seek to clarify certain passages in the draft Resolution relative to the Commission's Settlement implementation. The attached redline of the draft Resolution identifies revisions to address CAC's comments and reservations.

Broadly, CAC's comments address the following:
a. The appropriate Utility Prescheduled Facility (UPF) ${ }^{3}$ contract under the Settlement is an open implementation issue. SCE's unilateral determination to offer only the EEI form agreement for prospective UPF bids should not establish a precedent for future UPF or ADC agreements. SCE's unilateral establishment of an exclusive and single UPF "pro

[^0]forma" utilizing the EEI form agreement is not consistent with the Settlement terms. ${ }^{4}$ The Commission's Resolution should not endorse unilateral implementation actions under the Settlement absent full examination and consideration.
b. The Commission's Resolution should acknowledge the distinct requirements under the Settlement pertaining to the eligibility to bid and the designation of eligible products. UPFs are not simply eligible to bid; they are specifically eligible for contracts supplying capacity and energy under the CPUC's QF/CHP Settlement Program.
c. Several passages in the draft appear to be mistaken, inconsistent or outdated references that warrant clarification or revision. These include:
i) Care in distinguishing between Additional Dispatchable Capacity (ADC) from a CHP operation under the Settlement (Section 3.4.1.2 contemplating a modification to the Transition PPA) and dispatchable capacity available from a UPF operation. A UPF facility or generating unit may be an Exempt Wholesale Generator, as opposed to a CHP, and the dispatch capacity provided is not "additional" capacity.
ii) Clarify the reference to the Sycamore Transition PPA as "including" ADC, since it does not. Instead, the Sycamore Transition reflects the change in operations from a CHP, to a combined CHP/UPF, to a UPF/Exempt Wholesale Generator. The facility is not providing ADC from a CHP operation; rather it is providing dispatchable capacity from certain UPF generating units.
iii) Reflect the recent Commission Resolutions (especially E-4569 and E-4554) regarding qualified bids and qualified products; particularly with regard to the characterizations of bid selections and the Independent Evaluator's conclusions. The Resolution should acknowledge the material harm to the CHP program arising from the selection of ineligible bids and ineligible products that substituted for eligible CHP offerings.
iv) Update and correct the accounting references in the Need for Procurement section to reflect adopted Resolutions, the status of yet-to-be-filed Calpine RA-only contracts from Los Medanos and Gilroy, a pending application related to Chevron U.S.A. and the accurate MW Target A for SCE.
v) Clarify the references to UPFs relative to QF certification under 18 C.F.R. §292.205. UPFs are not required to be QFs from the term start date and through the duration of the proposed PPA; the definition of UPFs includes EWGs, which would necessarily not be qualifying cogeneration facilities in all instances relative to individual generating units. ${ }^{5}$
$4 \quad$ See, Settlement Term Sheet $\S \S 4.2 .6$ and 4.2.12.
5 Section 4.2.2.2 CHP Facilities converting to Utility Prescheduled Facilities. A CHP Facility that met the PURPA efficiency requirements (18 C.F.R. §292.205) as of September 2007 and converts to a Utility Prescheduled Facility is also eligible to participate in the CHP RFOs. After the Existing CHP Facility converts to a Utility Prescheduled Facility, it may be either a Qualifying Facility or an Exempt Wholesale Generator if the facility otherwise meets the criteria in this Section 4.2.2.2. (Emphasis supplied.)

## II. Discussion

## A. The Establishment of the UPF Pro-Forma Contract Remains an Open Implementation Issue

An implementation issue under the Settlement is the establishment of a UPF pro-forma contract. The Settlement parties acknowledged this fact and recognized this issue in the provisions of the Settlement Term Sheet. Section 4.2 .6 provides in pertinent part that "The CHP Pro-Forma PPA may be modified on a bilateral basis during negotiations for a particular CHP PPA or Utility Prescheduled Facility PPA. As set forth in Section 4.2.12 below, the IOUs may also offer other contract options in the CHP RFO." (Emphasis supplied.) Section 4.2.12, entitled "PPA Options in CHP RFOs," provides in pertinent part that - "As part of the bid package for each CHP-Only RFO, each IOU may request offers with specific (1) credit and collateral, (2) voluntary curtailment, and (3) dispatchability terms that differ from the CHP RFO Pro Forma PPA. As part of the bid package, IOUs may also offer the all source RFO in addition to the CHP-Only RFO and may also sign a hybrid contract of the two." (Emphasis supplied.)

These provisions reflect that the CHP RFO shall provide a UPF contract based upon the CHP RFO PPA. While the IOU "may" offer alternative PPAs, such offer is not the exclusion of a UPF contract relying upon the CHP RFO Pro-Forma PPA. Such contracts are in addition to the CHP RFO Pro-Forma PPA adapted for a UPF. Moreover, FERC has recently addressed the proper jurisdiction relative to such contracts as part of the state's authority to implement PURPA. ${ }^{6}$ The EEI contract form is not a PURPA jurisdictional contract and the Resolution should not prejudge this issue.

The draft Resolution recognizes that SCE's CHP RFO bid solicitation established unilaterally the form of agreement for a UPF bid and did not offer or entertain options for such bids based upon the CHP RFO PPA. Instead, SCE required or compelled any successful UPF bid to rely upon the EEI form agreement. The Commission's Resolution should not endorse or adopt a standard that the EEI form agreement imposed by SCE is an appropriate or required standard for either a UPF PPA or an ADC amendment contemplated by the Settlement.

## B. UPF Resources are not only Eligible to Bid, but Eligible for Contracts under the Settlement

While this may seem an obvious point, the draft Resolution contains passages that are subject to misinterpretation relative to the rights afforded to UPF resources. Under Section 4.8.1.1, "A CHP Facility that met the PURPA efficiency requirements as of September 20, 2007 and converts to a Utility Prescheduled Facility is eligible to participate in a CHP RFO or to obtain a PPA through bilateral negotiations or amend an existing Legacy PPA through bilateral negotiations." This section means that a UPF is not only eligible to bid, but also to

[^1] Filings, Docket Nos. ER13-558-000 and ER13-559-000 (Issued June 7, 2013).
secure a PPA under the Settlement. Besides the eligibility to bid, the Settlement addresses specific eligible products that embrace UPFs. Under Section 4.2.12 there are three additional product solicitations authorized for a CHP RFO. The second and third options voluntary curtailment and dispatchability - contemplate the type of product that may be available from a UPF. The Settlement's definition of CHP Procurement Processes also expressly includes UPF resources. In short, the Commission's Resolution should unequivocally recognize the UPF eligibility to bid, but also the eligibility to secure contracts under the Settlement.

## C. Several Specific Passages Warrant Refinement and Clarification

As noted in the introductory paragraphs, several passages in the draft appear to be mistaken, inconsistent or outdated references that warrant clarification or revision. These involve specific requirements of the Settlement, the accurate reflection of defined terms, and the updating for recent Commission determinations on Resolutions related to Settlement implementation. The attached redline provides recommended modifications to address these points, reinforce the Settlement provisions and objectives in support of future implementation actions.

## III. Conclusion

CAC supports the conclusion approving the Sycamore-SCE agreements under the Settlement. CAC seeks clarification of the draft Resolution to address the issues raised in these comments.

Respectfully submitted,


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7 CHP Procurement Processes: Procurement processes for CHP resources by the IOUs that count toward the MW and/or GHG Emissions Reduction Targets as specified in the Settlement. These include the CHP RFO PPAs, bilaterally negotiated and executed CHP PPAs, the AB 1613 Feed-In Tariff, QF Standard Offer CHP PPAs for eligible CHP Facilities pursuant to PURPA, Optional As Available PPAs for eligible CHP Facilities, certain IOU-owned CHP, existing CHP that converts to a Utility Prescheduled Facility, and new behind the meter CHP. (Emphasis supplied.)

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Service List for Draft Resolution E-4555
$\begin{array}{ll}\text { Attachment } & \text { CAC Redline of the 08-06-13 Sycamore E-4555 Energy Division Draft } \\ & \text { Resolution Sycamore (Redacted)(SCE AL2784-E) }\end{array}$

## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

## ENERGY DIVISION

Agenda I.D. 12308
RESOLUTION E-4555
September 5, 2013

## REDACTED <br> RESOLUTION

Resolution E-4555. Southern California Edison Company ("SCE") requests approval of four agreements and two amendments ("Agreements") with Sycamore Cogeneration Company ("Sycamore"), an affiliate.

PROPOSED OUTCOME: This Resolution approves the Agreements between Southern California Edison and Sycamore Cogeneration Company pursuant to the terms of the Qualifying Facility and Combined Heat and Power Program Settlement Agreement.

SAFETY CONSIDERATIONS: The Agreements are between Southern California Edison Company and Sycamore. The Commission's general jurisdiction extends only over SCE, but not Sycamore. Based on the information before us, these Agreements do not appear to result in any adverse safety impacts on the facilities or operations of SCE.

ESTIMATED COST: Capacity, energy, and variable cost components of the Agreements are confidential at this time due to its selection through the CHP Request For Offers process, which is a competitive solicitation process.

By Advice Letter 2784-E Filed on October 1, 2012.

## SUMMARY

Southern California Edison Company's ("SCE's") amended Power Purchase and Sale Agreements and Resource Adequacy and Unit Contingent Toll Confirmation Letters ("Sycamore Agreements") with Sycamore Cogeneration Company ("Sycamore" or "Seller") are the result of a successful bid, Short Listing, evaluation, and selection through the 2011 SCE CHP RFO process.

These Sycamore Agreements, subject to the findings reflected in this Resolution, comply with the requirements of Decision ("D.") 10-12-035, in which the Commission adopted the Commission-approved Qualifying Facility and Combined Heat and Power Program Settlement Agreement ("Settlement") and the CHP Program Request For Offers process under it, and is approved.

On October 1, 2012, SCE filed Advice Letter ("AL") 2784-E requesting Commission approval of six agreements with Sycamore, an affiliate of SCE, ${ }^{1}$ for the period between January 1, 2014 to December 31, 2020.

Sycamore owns an existing natural gas-fired combined cycle topping-cycle qualifying cogeneration facility in Bakersfield, California that supplies thermal and electric energy to Chevron U.S.A.'s enhanced oil recovery operations. The facility has four combustion turbines and a maximum operating capacity of 300 MW. SCE executed an initial contract based on a QF Standard Offer Contract with Sycamore's predecessor, Kern River Cogeneration Company ("KRCC"), on December 18, 1984, for 20 years. In 1986, SCE agreed to KRCC's assignment of the PPA to Sycamore and to a restated agreement of 284 MW of contract capacity and baseload energy. On June 17, 2008, SCE and Sycamore entered into a letter agreement pursuant to the pricing established in D.07-09-040 for 300 MW of firm capacity and energy. Sycamore is currently selling baseload energy and additional-dispatchable capacity to SCE under a Transition PPA amended t $\theta$ inelude Additional Dispatehable Capacity, approved in Commission Resolution E-4571. The Transition PPA reflects a change in operations from a CHP, to a combined CHP / Utility Prescheduled Facility (UPF). ${ }^{2}$ The Sycamore Transition Agreements will terminate the day prior to the start date of the Sycamore CHP RFO Agreements, if they receive regulatory approval prior to June 30, 2014.
Sycamore provided a competitive offer to the CHP RFO. The Agreements are comprised of modified and amended CHP RFO Pro Forma PPA, Resource

[^2]Adequacy Confirmation, Unit Contingent Tolling Confirmation, and EEI Agreements. The Agreements were modified without affiliate preference to Sycamore and are of reasonable cost.

The Agreements will count toward the Settlement MW and GHG Targets as the RFO is an eligible procurement process per Section 4 of the Settlement Term Sheet. As an Existing CHP Facility ${ }^{3}$ converting to a Utility Prescheduled Facility ("UPF"),4 Sycamore's capacity of 300 MW will count toward SCE's 1,402 MW procurement Target at the end of the Initial Program Period. The UPF conversion will count as a 95,936 MT GHG Credit per the GHG Accounting Rules of the Settlement.

Contrary to protests by the Joint Parties, Sycamore will provide multiple power products under the Agreements, is eligible for an RFO contract as a UPF, and the net capacity costs associated with the Agreements will be recovered in accordance with Section 13.1.2.2 of the Settlement.

## BACKGROUND

On December 16, 2010, the Commission adopted the Qualifying Facility and Combined Heat and Power Program Settlement Agreement ("Settlement") 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 new qualifying facility (" $\mathrm{QF}^{\prime}$ ) contracts.

The QF/CHP Settlement establishes Megawatt ("MW") procurement targets and Greenhouse Gas ("GHG") Emissions Reduction Targets the investor-owned utilities ("IOUs") are required to meet by entering into contracts with eligible CHP Facilities, which provide eligible products, as defined or referenced in the

[^3]Settlement. 5 Pursuant to D.10-12-035, the three large electric IOUs must procure a minimum of $3,000 \mathrm{MW}$ 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.
Among other things, D.10-12-035 updates methodologies and formulas for calculating the Short Run Avoided Cost ("SRAC") energy price to be used in the Standard Contract for QFs with a Power Rating that is Less than or Equal to 20MW ( the "QF Standard Offer Contract"), Transition PPAs, amendments to existing QF PPAs, and Optional As-Available PPAs. The SRAC methodology under the QF/CHP Settlement includes:
(1) By January 1, 2015, transitioning SRAC pricing from a formula that is based in part on administratively-determined heat rates to a formula that solely uses market heat rates;
(2) IOU-specific time-of-use ("TOU") factors to be applied to energy prices to encourage energy deliveries during the times when the energy is most needed by customers;
(3) A locational adjustment based on California Independent System Operator ("CAISO") nodal prices; and,
(4) Pricing options based on whether a cap-and-trade program or other form of GHG regulation is developed in California or nationally.
In addition, 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 exclusively for CHP resources ("CHP RFOs") 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.

Per Section 5.1.4, the IOUs will conduct three CHP RFOs during the Initial Program Period scheduled at regular intervals, with the first initiated no later than 90 days after the Settlement Effective Date, February 21, 2012. The three

[^4]RFOs shall solicit CHP resources for an amount no less than the Net MW Target (the MW Target A, B, or C ${ }^{6}$ not otherwise procured by the Section 4 procurement processes) for each IOU.
SCE launched the 2011 CHP RFO for 630 MW on December 15, 2011. SCE posted to its website. ${ }^{7}$ Participant Instructions, an offer template, contract documents for CHP and Utility Prescheduled Facility ("UPF") offers, and other information. Participant Instructions referenced the pro forma contracts for the CHP and UPF offers, described eligibility and contract term requirements, materials for submission, and the evaluation criteria. Baseload CHP offers were encouraged to submit the CHP Pro Forma PPA attached as Exhibit 5 to the Settlement. UPFs were encouraged to submit four "UPF Documents." ${ }^{8}$ The determination to establish the UPF Documents as the "pro-forma" for UPF resources was unilaterally determined and implemented. The action raises issues associated with obligations under Sections 4.2.6 and 4.2.12 regarding the offering of a modified CHP RFO PPA for UPF resources. The IOU has an option to provide other additional forms of agreement, like the UPF Documents, but not to the exclusion of an appropriately modified CHP RFO pro forma for UPF projects.

SCE decided to use a two track solicitation for the first RFO to manage the risk related to interconnection costs that would be borne by the IOUs and ratepayers. The First Track solicited Existing CHP Facilities, Utility Prescheduled Facilities ("UPFs"), and New or Repowered CHP Facilities with an existing interconnection and a CAISO Phase I Interconnection Study. If the Offeror had no such study completed, the Offeror permitted SCE to terminate the contract if network upgrade costs based on a future study exceeded a certain amount. The Second Track was for New or Repowered CHP Facilities where the Offeror was unwilling to give SCE the termination right.
At the 2011 CHP RFO Offeror's Conference, SCE outlined "Keys to a Successful Offer" including a preference for competitively-priced offers, optionality by

[^5]varying the offer's term length and providing curtailment provisions, a preference to execute Pro-Forma CHP or UPF Documents, and signs of project viability for new, expanded or repowered CHP including progress toward interconnection.

On February 16, 2012, SCE received Indicative Offers from the Offerors. SCE evaluated the Indicative Offers almost exclusively with a quantitative valuation of the net present value (NPV) of the contract cost or benefit. The net present value was normalized by the contract's contribution to the Settlement MW Target to yield a \$NPV/MW metric. From the Indicative Offers SCE selected a Short List of offers therequalified? for further participation in the RFO. SCE notified bidders of the Short List on March 16, 2012. SCE then negotiated contractual terms with Short Listed Offerors and, if terms were agreed upon by both parties, the Offeror was permitted to submit a Final Offer. Final Offers, which were contractually binding if SCE selected the Final Offer, were submitted on May 29, 2012. SCE then evaluated the Final Offers considering quantitative factors, as it did with the Indicative Offers, and qualitative (non-price) factors. SCE continued to use the \$NPV/MW metric and calculated the net NPV for all offers and combinations of offers. The first qualitative factor SCE evaluated was the contract's contribution to the Settlement GHG Emissions Reduction Target. SCE evaluated the Final Offers on additional qualitative factors.
SCE notified the Offerors of Selected Offers on June 21, 2012. SCE selected five qualified-Final Offers from four counterparties, including Sycamore. SCE proposed that the five projects total 832 MW and 99,151 metric tons of GHG per the terms of the Settlement.

Sycamore's offer consists of baseload energy, Resource Adequacy capacity, dispatchable capacity, and other products. On July 2, 2012 SCE executed the CHP PPA, RA and UC Toll Confirmations with Sycamore. Pursuant to Section 4.10.2 of the Term Sheet, SCE utilized a Tier 3 filing to submit AL 2784-E for new,

[^6]repowering, or existing PPAs that are materially modified from the PPAs approved in the Settlement. AL 2784-E is the fourth of four Advice Letters submitted for Commission approval pursuant to the 2011 SCE CHP RFO.

Table 1: Contract Term Periods between Sycamore and SCE

| Facility | Type | Start | Termination |
| :--- | :--- | :--- | :--- |
| Sycamore | Legacy PPA | $12 / 18 / 1984$ |  |
| Sycamore | Letter Agreement ext. Legacy PPA | $6 / 17 / 2008$ | $5 / 23 / 2013$ |
| Sycamore | Transition Agreements | $5 / 23 / 2013$ | Seller's Election |
| Sycamore | SCE CHP RFO Agreements | $1 / 1 / 2014$ | $12 / 31 / 2020$ |

Sycamore bid its four generating units as a single facility into the CHP RFO with a PMax of 340 MW . Under the Sycamore Agreements, the units will provide firm, as-available, and dispatchable capacity and associated energy. In accordance with the declining steam requirements of Sycamore's thermal host, Sycamore's generating units will operate with greater levels of dispatchability. The CHP PPA governs firm and as-available operations while the RA and Toll Confirms govern dispatchable operations. RFO participants using the RA and Toll Confirmations were also required to submit an EEI Master Agreement and an EEI Collateral Annex, which are respectively modified by an EEI Cover Sheet and Paragraph 10 to the Collateral Annex. These four documents comprise an "EEI Agreement," which SCE has been authorized to enter into within the credit limits specified in D.04-12-048; however, as previously noted, such authorization does not dismiss the obligations under the Settlement relative to UPF facilities and reliance upon the CHP RFO pro-forma agreement (See, Sections 4.6 and 4.2.12 of the Settlement Term Sheet). The CHP PPA, Confirms, and Master Agreement were each modified by an amendment, indicated in Table 2 below.

Table 2: Structure of Agreements between SCE and Sycamore

Southern California Edison AL 2784-E / nc1

| Agreement Type | Power Purchase and Sale Agreement between SCE and Sycamore (RAP ID \#2815) ("Sycamore CHP PPA") | EEI Master <br> Power <br> Purchase and Sale Agreement between SCE and Sycamore (RAP ID \#2816) ("Master Agreement") | "Confirms" |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Master Power Purchase and Sale Agreement Confirmation Letter between Sycamore and SCE ("Sycamore RA Confirm") | Master Power <br> Purchase and Sale <br> Agreement <br> Confirmation <br> Letter ("Sycamore <br> Toll Confirm") |
| Agreement modified by | Amendment <br> No. 1 to the Power Purchase and Sale Agreement ("Sycamore CHP PPA Amendment No. 1") | Cover Sheet <br> Paragraph 10 of the Collateral Annex to the Master Agreement <br> Amendment No. 1 to the EEI Agreement and the Confirms | Amendment No. 1 to the EEI Agreement and the Confirms | Amendment No. 1 to the EEI Agreement and the Confirms |
| Sycamore <br> Units | Units \#1, \#3 |  | Units \#2, \#3, \#4 | Units \#2, \#3, \#4 |

Sycamore's declining thermal need necessitates its conversion to a Utility Prescheduled Facility with dispatchable generating capacity as shown in Table 3 below. Units 2 and 4, which currently provide dispatchable capacity under the Transition Agreements, will continue dispatchable operations subject to RA and Toll Confirms. Unit 3 will transition from providing Firm and AsAvailable Capacity, to As-Available Capacity, and lastly to Dispatchable Capacity in three phases over the term of the agreement. Unit 1 will provide Firm and As-Available Capacity for the entire term.

Southern California Edison AL 2784-E / nc1
Table 3: Operational Arrangements and Power Products from Sycamore

|  | Sycamore Generating Unit (Pmax) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Calendar Year | 1 (85 MW) | 2 (85 MW) | 3 (85 MW) | 4 (85 MW) |
| 2013 | Transition PPA | RA E Toll Confirm | Transition PPA | RA E Toll Confirm |
| 2014, Phase I | Sycamore CHP <br> PPA: Baseload <br> CHP (Firm + <br> As-available) <br> with Collateral | Confirms: <br> UPF (RA + <br> Toll) with <br> Collateral | Sycamore CHP | $\begin{aligned} & \text { Confirms: UPF } \\ & \text { (RA + Toll) } \\ & \text { with Collateral } \end{aligned}$ |
| 2015 |  |  | PPA: Baseload CHP (Firm + As-Available) with Collateral |  |
| 2016, Phase II |  |  | Sycamore CHP |  |
| 2017 |  |  | PPA: Baseload |  |
| 2018 |  |  | CHP (Only <br> As-Available) <br> without <br> Collateral |  |
| 2019, Phase III |  |  | Confirms: UPF |  |
| 2020 |  |  | (RA + Toll) with Collateral |  |

A summary of the modifications to the terms and conditions included in the Sycamore Agreements are detailed below. Additional analyses of the terms of the Agreements are included within the Confidential Appendix A of this Resolution.

## NOTICE

Notice of AL 2784-E was published 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 3.14 of the Commission's General Order 96-B. AL 2784-E was served to the service list of R.12-03-014 regarding the Long Term Procurement Plans.

## PROTESTS

Advice Letter 2784-E was timely protested by Shell Energy North America, Marin Energy Authority, and Alliance for Retail Energy Markets (collectively "Joint Parties") on October 22, 2012. AL 2784-E received a late response from

Cogeneration Association of California ("CAC") on October 28, 2012. AL 2784-E received a timely reply from SCE on October 29, 2012.

Protest 1: Eligibility of RA Capacity-only contracts (a) within the CHP RFO and (b) for CAM treatment.

In a partial protest, Joint Parties assert that the Sycamore contracts are, due to low forecasted capacity factors, "Essentially...RA capacity-only contracts" and such contracts are not authorized by D.10-12-035.10 They reference their protest to SCE AL 2771-E ${ }^{11}$ to assert that D.10-12-035 did not anticipate that the IOUs would purchase capacity-only contracts via the RFOs and are thus ineligible for contracts. Joint Parties state that because capacity-only contracts are not within the scope of the Settlement, the Sycamore contract is ineligible for Cost Allocation Mechanism ("CAM") treatment. Specifically, the Joint Parties recommend rejection of the RA and Toll contracts for dispatchable capacity. ${ }^{12}$
CAC responds that the Joint Parties' protest is flawed because Sycamore's circumstances are "distinctly different" than the facilities in question from SCE AL 2771-E. CAC states that the scope of review should be limited to conditions specific to Sycamore, and not likened to RA-only PPAs that "are not explicitly eligible under the Settlement." ${ }^{13}$
CAC and SCE state that Sycamore is eligible for the contract as a Utility Prescheduled Facility as defined in the Settlement. ${ }^{14}$ CAC references the terms related to Utility Prescheduled Facilities in the Settlement Term Sheet. SCE specifically references the IOUs' ability to request dispatchability terms different from the RFO Pro Forma PPA per Settlement Term Sheet Section 4.2.12.
CAC also distinguishes the power products provided by Sycamore's UPF operations (which would provide capacity, day ahead and real time energy)

[^7]from those of a CHP facility providing only RA capacity. ${ }^{15}$ Similarly, SCE replies that the Sycamore contracts are for both RA and dispatchable energy. SCE adds that the uncertainty in the level of dispatched energy is irrelevant, "does not negate SCE's contractual right to procure energy," and does not make it an "ancillary or subordinate product to RA." ${ }^{16}$

SCE replies to Joint Parties' recommendation for a partial rejection, stating that the distinct energy and capacity contracts were negotiated as a single transaction. SCE states that each contract contains provisions that terminate the set of agreements in the event of an individual contract's default. ${ }^{17}$
SCE replies that the Settlement does not preclude RA-only contracts, citing the eligibility requirements of Section 4.2 of the Settlement Term Sheet. ${ }^{18}$ On July 25, 2013 the Commission approved alternate version 1 of E-4569, which states that the Commission does not intend to approve any capacity-only contracts in its 2011 or future CHP RFOs, except for Utility Prescheduled Facilities. ${ }^{19}$

The Commission rejects the Joint Parties' protest. Sycamore is an eligible Utility Prescheduled Facility that executed a hybrid contract, as discussed in detail within the Consistency with Eligibility Requirements for CHP Requests for Offers.

Protest 2: Potential extension of CAM treatment for RA Capacity-only CHP Resources in excess of an IOU's MW Target.
Joint Parties protest that permitting capacity-only products could increase the CHP resources procured and subject to CAM in excess of the MW Targets thereby reducing RA procurement options for unbundled customers. ${ }^{20}$ Joint Parties request that the Commission limit RA capacity cost allocation to bundled

[^8]sales customers. ${ }^{21}$ Joint Parties also suggest that a net capacity cost can only be calculated for contracts that include both energy and capacity products. ${ }^{22}$

CAC responds that because Sycamore may be procured as an eligible UPF, D.10-12-035 authorized the IOUs to procure resources and recover costs associated with the CHP Program on behalf of ESP and CCA customers per Section 13.1.2.2 of the Settlement Term Sheet. ${ }^{23}$ SCE reiterates this point and asserts that to recover costs per the Joint Parties' recommendation would disadvantage bundled customers by allowing ESP and CCA customers to avoid their obligation under the CHP Program. ${ }^{24}$

The Commission rejects Joint Parties' protest in accordance with previous discussion in E-4537 on the allocation of CHP Program costs to customers. This discussion is detailed within in the Consistency with Cost Recovery Requirements section. In addition, since the Sycamore agreements will consist of both energy and capacity, net capacity costs may be calculated.

Protest 3: Request for a workshop on the scope of CHP RFO-eligible products
Joint Parties request that Energy Division convene a workshop to discuss whether the QF/CHP Settlement Agreement authorizes the solicitation of RAonly products. ${ }^{25} \mathrm{CAC}$ responds that since Sycamore is eligible under the explicit terms of the Settlement as a UPF, a workshop is unnecessary. ${ }^{26}$ SCE replies that to disqualify RA-only contracts would require revising the Settlement. ${ }^{27} \mathrm{As}$ stated in AL 2784, Sycamore is not an RA-only offer. This protest is not germane to the agreements that are subject to this request and thus is rejected.

[^9]
## DISCUSSION

On October 1, 2012, SCE filed Advice Letter AL 2784-E which requests
Commission approval of Agreements with Sycamore Cogeneration Company.
Specifically, SCE requests that the Commission:

1. Approve the Agreements in their entirety;
2. Find that the Agreements, and SCE's entry into the Agreements, are reasonable and prudent for all purposes, including but not limited to, recovery in rates of payments made to Sycamore, subject only to further review with respect to the reasonableness of SCE's administration of the Agreements;
3. Find that the 300 MW associated with the Confirmations apply toward SCE's procurement target of 1,402 MW of CHP capacity in the Initial Program Period, as established by the QF/CHP Program;
4. Find that the Agreements contribute a 0.96 MMT credit toward SCE's GHG Target as they are for an Existing CHP Facility with a change in operations; and
5. Authorize other and further relief as the Commission finds just and reasonable.

## Energy Division evaluated the CHP PPA 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 Eligibility Requirements for CHP Requests For Offers ("RFOs")
- 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 require Procurement Review Group ("PRG") and Cost Allocation Mechanism ("CAM") Group 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. 28

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

On December 16, 2010, the Commission adopted the QF/CHP Program Settlement 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 new QF contracts. Among other things, it establishes methodologies and formulas for calculating SRAC to be used in the new QF Standard Offer Contract. Furthermore, the Settlement allows for bilaterally negotiated contracts with CHP QFs to determine energy and capacity payments mutually agreeable by relevant parties and subject to CPUC approval. Finally, the Settlement establishes a MW and GHG target for the IOUs. The IOUs must procure a minimum of $3,000 \mathrm{MW}$ of CHP. The IOUs must reduce greenhouse gas emissions consistent with their allocation of the CARB Scoping Plan CHP Recommended Reduction Measure in proportion to the IOUs' and Energy Service Providers' / Community Choice Aggregators' current share of statewide retail electricity load. The QF/CHP Settlement became effective on November 23, 2011. The Settlement Term Sheet establishes criteria for contracts with Facilities including:

## Consistency with Definition of UPF, 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

[^10]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 CHP topping-cycle facilities, establishes efficiency standards for CHP bottoming-cycle facilities, and, for certain new facilities, mandates compliance with a fundamental use test.

Topping-cycle CHP Facilities must demonstrate that their useful thermal energy output is no less than 5 percent of the total annual energy output. Additionally, any topping-cycle CHP Facility installed on or after March 13, 1980, that is fueled by natural gas or oil must operate at an annual efficiency of at least 42.5 percent, or, if the useful thermal energy output is less than 15 percent of the total energy output of the facility, the efficiency must be no less than 45 percent. ${ }^{29}$ Bottomingcycle CHP Facilities installed on or after March 13, 1980, must meet an annual efficiency requirement of at least 45 percent. ${ }^{30}$

Per Section 4.8.1.1 of the Settlement Term Sheet, Sycamore is an Existing CHP Facility that is qualified to convert to a Utility Prescheduled Facility. It operated as a Qualifying Cogeneration Facility and met the definition of "cogeneration" under the Public Utilities Code Section 216.6 as of September 20, 2007. A UPF operation may or may not be a qualifying facility under the Code of Federal Regulations pursuant to the Settlement. For example, and CHP Facility may incorporate a UPF generator and remain a qualifying cogeneration facility. A UPF, or UPF generating units as part of a CHP facility, may also be EWG operations and remain eligible under the Settlement.

FERC recently addressed the issue of a UPF operation under the Settlement. $\frac{31}{}$ FERC held that the Sycamore Transition PPA "...is part of a continuing obligation to purchase pursuant to PURPA and was entered into pursuant to a state regulatory

[^11]> authority's implementation of PURPA...the QF/CHP Settlement pursuant to which the Transition PPAs were established is one of the California Commission's procurement programs established pursuant to PURPA. Therefore, because the sales made pursuant to the Applicants' Transition Agreements are pursuant to a California Commission implementation of section 210 of PURPA and the QF/CHP Settlement, our approval of the affiliate transaction is unnecessary, and the Applications are dismissed."

Sycamore meets the definition of a Utility Prescheduled Facility, consistent with the eligibility requirements of the QF/CHP Settlement.

## Consistency with Eligibility Requirements for CHP Requests for Offers ("CHP RFOs")

Per Section 4.2 of the Settlement Term Sheet, the IOUs are directed to conduct Requests for Offers exclusively for CHP and UPF resources as a means of achieving their MW and GHG Emissions Reduction Targets. Per Section 4.2.2.1, CHP Facilities with a nameplate Power Rating greater than 5 MW may bid into the CHP RFOs. The CHP Facility must meet the State and Federal (PURPA) requirements ${ }^{32}$ for cogeneration and the Emissions Performance Standard ("EPS"). Per Section 4.2.2.2, aA CHP Facility that has met the PURPA efficiency requirements as of September 20, 2007 and that converts to a Utility Prescheduled Facility is eligible to participate in the CHP RFOs whether it is a Qualifying Facility or Exempt Wholesale Generator.

Sycamore is converting from an Existing CHP Facility to a combined CHP/Utility Prescheduled Facility and may ultimately be exclusively a UPF. As required by Section 4.2.2.2 of the Settlement Term Sheet, Sycamore met the efficiency requirements as of September 20, 2007 while operating under a Legacy PPA with SCE. Sycamore has a nameplate Power Rating of greater than 5 MW, meets the State and Federal requirements for cogeneration, and as discussed later in the Consistency with the Emissions Performance Standard section of this Resolution, is compliant with the EPS.

[^12]Sycamore meets the eligibility requirements to bid into the SCE CHP RFO consistent with Section 4.2.2.1 and 4.2.2.2 of the Settlement Term Sheet, and to secure a contract for eligible products under Sections 4.2.6 and 4.2.12.

Joint Parties protest that the Agreement is essentially a Resource Adequacy-only contract and recommend the rejection of the RA and Toll Confirmations. Contrary to this assertion, Sycamore will provide a variety of power products including: Firm and As-Available Capacity and baseload energy under the CHP PPA; and Resource Adequacy and UC Tolling Capacity and dispatchable energy under the Confirmations. These Agreements were negotiated together to accommodate the declining steam demand of Sycamore's thermal host and multiple generating units. Sycamore is eligible to participate in the RFO as a Utility Prescheduled Facility -an arrangement evident in D.10-13-035 and throughout the Settlement Term Sheet - which enables a CHP resource to continue operating when a thermal host no longer exists. ${ }^{33}$ The Settlement specifically contemplates UPF eligibility not only for participation in a CHP RFO bid; but also to secure a contract per Section 4.2.6. In addition, per Section 4.2.12 of the Settlement Term Sheet, IOUs can request offers with dispatchability terms that differ from the CHP RFO Pro Forma PPA, which accommodate low capacity factors associated with UPF operations.
The Commission rejects Joint Parties' protest that Sycamore only provides Resource Adequacy Capacity. The Agreements structure Sycamore's multi-unit operations to provide multiple power products as a Utility Prescheduled Facility, consistent with the requirements of the Settlement Term Sheet.

## Consistency with Settlement MW Counting Rules

Per Settlement Term Sheet Section 4.8.1.2, a New PPA with a UPF counts toward the MW Targets if the existing QF PPA expires before the end of the Transition Period. Per E-4571, Sycamore was eligible for a Transition PPA with SCE because it was operating under an extension of a Legacy PPA that was expiring during the Transition Period.

Per Settlement Term Sheet Section 5.2.3.1, Sycamore Cogeneration is an Existing CHP Facility. Sycamore Cogeneration is a gas-fired Topping Cycle CHP Facility that exported and delivered electric power to SCE listed by QF ID 2058 in SCE's

[^13]July 2010 Qualifying Facilities Semi-Annual Status Report. The MWs counted for the Agreements executed with Sycamore will be the published Contract Nameplate value, 300 MW. This is appropriately reflected in the Advice Letter. The 300 MW Contract Nameplate value for the Sycamore Facility will count toward SCE's MW procurement target.

## Consistency with Settlement Greenhouse Gas Accounting Methodology

Per Settlement Term Sheet Section 7.3.1.3, a CHP Facility Change in Operations or Conversion to a Utility Prescheduled Facility counts as a GHG credit for the IOUs' GHG Emissions Reduction Targets. Measurement is based on the baseline year emissions (the average of the previous two years of operational data) minus the projected PPA emissions and emissions associated with replacing $100 \%$ of the decreased electric generation at a time differentiated heat rate.

For example, the GHG Credit is calculated by first subtracting the expected emissions from operations in the Agreements from the baseline emissions from years 2010-2011. The GHG Credit deducts from this difference the emissions resulting from "replacement" electric generation. Replacement (or "backfill") electricity accounts for the market electricity required to compensate for the decreased operations from the conversion to a UPF.

The Agreements provide SCE rights as the Scheduling Coordinator for the Sycamore facility. SCE anticipates that generating operations will be reduced compared to previous operations. Unit 1 will operate as baseload or the length of the term, while Unit 3 will do so until 2018. 2 and 4 will continue to operate as dispatchable units, as with the Transition PPA. This change in the facility's operating schedule reduces its greenhouse gas emissions proportionately. Per Section 7.3.1.3 of the Settlement Term Sheet, the UPF conversion accounts as a GHG Credit of 95,936 metric tonnes (MT) toward the GHG Emissions Reductions Target. This is appropriately reflected in the Advice Letter.

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

Sycamore's operations under the Agreements as a Utility Prescheduled Facility will be significantly reduced compared to the prior two years of operations, yielding a GHG Credit of 95,936 MT toward the GHG Emissions Reduction Target.

## Consistency with Cost Recovery Requirements

Ordering Paragraph 5 of D.10-12-035 orders the three large electric IOUs to recover the net capacity costs from CHP Program contracts on a non-bypassable basis from all bundled service, Direct Access ("DA") and Community Choice Aggregator ("CCA"), and Departing Load Customers ("DLC"), except for CHP DLC. With this authorization, the Settlement supersedes to the extent necessary D.06-07-029 and D.08-09-012, which established and modified the Cost Allocation Mechanism, respectively. Section 13.1.2.2 of the Settlement Term Sheet requires that the IOU recover CHP contract costs, net of the value of energy and ancillary services provided to the IOU. Non-IOU load-serving entities ("LSEs") receive Resource Adequacy ("RA") credits in proportion to the allocation of the net capacity costs that they pay.

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. AL 2645-E determines the net capacity costs as the result of a debit and credit, where: ${ }^{34}$

- Debits include: Capacity and energy costs, including QF/CHP Program contracts that are eligible for net capacity cost recovery
- Credits include: Energy revenues for QF/CHP Program contracts that are eligible for net capacity cost recovery

Resource adequacy benefits are to be allocated according to the share of the net capacity costs paid by load-serving entities serving direct access and community choice aggregation customers as prescribed in Section 13.1.2.2 of the QF/CHP Settlement Term Sheet.

Joint Parties protest that approving a "capacity-only," CAM-eligible CHP facility would allow procurement in excess of the MW Targets and therefore decrease the procurement options for ESPs and CCAs. As a result, they recommend that the allocation of net capacity costs associated with the RA Confirm be limited to bundled customers, or rejected outright because the Settlement did not

[^14]contemplate capacity-only offers. Chiefly, as discussed in the Consistency with Eligibility Requirements for CHP Requests for Offers section, the Agreements inseparably compose Sycamore's multi-product operations as a UPF. Secondly, Joint Parties submitted substantively similar comments regarding net capacity cost recovery to E-4537 after filing the protest to the instant AL 2784-E. In these comments Joint Parties recommend to "cap" the amount of net capacity costs allocated to DA and CCA customers equal to the Settlement MW Target, which would have the effect of allocating net capacity costs for Transition PPAs only to bundled customers. ${ }^{35}$ We reiterate pertinent parts of our discussion in E-4537.

To restrict net capacity cost recovery for the RA Confirm would transfer cost responsibility for any system-wide benefits afforded under this contract strictly to bundled customers. Limiting cost recovery would run contrary to the Commission's D.10-12-035 adopting the Settlement, which holds CCA and DA customers responsible for their share of net capacity costs. Furthermore, from a policy standpoint, we are not convinced that such an approach would be equitable. Resource Adequacy benefits customers regardless of their Load Serving Entity. To deviate from the cost recovery terms described in Section 13.1.2.2 for the RA Confirm would shift RA costs from CCA and DA customers to IOU customers, even when CCA and DA customers would enjoy RA benefits and credits. For these reasons Energy Division rejects the recommendation to limit allocation of net capacity costs to SCE's bundled customers.

The Commission rejects Joint Parties' protest to restrict allocation of costs. Recovery of a pro-rata share of the net capacity costs associated with the CHP Program from DA and CCA customers is consistent with Section 13.1.2.2 of the QF/CHP Settlement Term Sheet and is reasonable given that CCA and DA customers will benefit from Resource Adequacy.

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.

## Need for Procurement

[^15]SCE's total MW procurement goal for the CHP Program is $1,402 \mathrm{MW}$, with 630 MW allocated to Target A. SCE's 2020 GHG Emissions Reduction Target is 2.15 MMT. As of the April 1, 2013 CHP Semi-Annual Report, SCE has executed contracts proposed to contribute 847 MW and 132,372 MT toward these goals.

The 2011 CHP RFO closed on May 9, 2013 with the withdrawal of the final participant in Track 2. As a result, SCE's procurement from the 2011 CHP RFO includes Berry ( 42 MW approved in E-4553), Los Medanos Energy Center (280.5 MW reduced to a maximum of 140.25 MW per alternate version 1 of E-4569), Gilroy ( 120 MW reduced to a maximum of 60 MW in alternate version 1 of E-4569, issued July 31, 2013), and Harbor (Energy Division recemmended denial of 80 MW in Resolution E-4554, issued August 19, 2013but the Commissien has not voted upen the Draft Reselution at the time of this mailing). The reduced capacity levels from Resolution E-4569 depend upon subsequent agreements yet-to-be-filed with the Commission. In light of the Commission's approval of Resolutions IfE-4554 4569 and E-45554 are approved as proposed, and accounting for the potential contracts for permitted capacity under E-4569, SCE will procure 542.25 MW and will fail to meet the Net MW Target A of 590 630 MW by the closing of the CHP RFO. 36 As a result, pursuant to Section 9 of the Settlement Term Sheet, SCE may be subject to a CHP Auditor.

## Cost Reasonableness

To determine the robustness of an RFO the Commission may compare the MWs associated with CHP QFs that would be eligible to participate with the RFO, the total MWs received during the RFO, and the MWs an IOU needs to fulfill an interim (A, B, or C) MW Target. The IE approximates that $4,000 \mathrm{MW}$ of CHP facilities could participate in the RFO and would be able to provide electricity to the IOUs and count toward the MW Targets. From this range of potential Offerors, those currently with agreements that end beyond the Transition Period

[^16]may be less likely to participate. As described in the Confidential Appendix A, SCE received Indicative Offers from CHP facilities (excluding alternative offers from an individual facility) which total an amount several times greater than their MW Target A of 630 MW. Therefore, the number of Offerors that participated in the SCE CHP RFO provided a highly robust solicitation.
The 2011 SCE CHP RFO received offers from a number of counterparties, providing a variety of projects and robust amount of capacity several times greater than SCE's MW Target A.

SCE's evaluation methodology uses a two stage approach. The first stage evaluates Indicative Offers almost exclusively by the net present value of their costs and benefits and their contribution to the Settlement MW Target. Inputs to calculate \$NPV/MW include:


Benefits include:

- Capacity benefits based on monthly firm capacity offered according to CPUC Resource Adequacy accounting, pursuant to CPUC and CAISO rules for dispatchable and non-dispatchable facilities;
- Energy benefits based on the forecasted market and locational value of energy; Ancillary Service and Real-Time flexibility benefits for dispatchable facilities based on a production simulation of deliveries;
- Credit/Collateral values based on providing performance assurance per Term Sheet Section 4.2.8.

Costs include:

+ Capacity charges; Variable O\&M charges; Energy Payments; Other costs;
+ Seller and/or Buyer responsibility of GHG Compliance Cost per Term Sheet Sections 4.2.7.2-4.2.7.3;
+ Annual Transmission system upgrade costs for new, expanded, or repowered facilities based on a CAISO Phase I Interconnection Study;
+ Debt Equivalence indirect costs estimated to be incurred as a debt-like obligation by executing long-term PPAs.
To determine whether offer prices were excessive compared to alternatives, SCE developed long-term forecasts of RA capacity, natural gas, electricity, and GHG costs per Term Sheet Section 5.4.1.

The quantification of $\$ N P V / M W$ is used in order to minimize cost while choosing projects that fulfill the MW Target, which SCE considered to be a procurement need. As required by Section 4.2.5.7 of the Settlement Term Sheet, SCE used this measure as an analysis of market value for the Offers. \$NPV/MW was the primary metric used in determining the Short List. Once notifying the Short Listed Offerors of their status, SCE began negotiations with the counterparties.

Per Section 4.2.6 and 4.2.12 of the Settlement Term Sheet, bilateral negotiations are permitted to modify the CHP RFO Pro Forma PPA, all source RFO contracts and/ or a hybrid of the agreements (in this case, the UPF Documents). SCE discouraged modifications except for those that add value, and accepted a limited number of Offeror-proposed changes that did not affect the product, pricing, or risk. ${ }^{37}$ During negotiations SCE and Sycamore agreed to modify sections regarding (1) the need for cross -default, -termination, and -condition precedent provisions across the contracts; (2) requirements for CPUC and FERC approvals; (3) the need to integrate the contracts in consideration of Unit 3's operational changes; (4) the affirmation that SCE has sole discretion on replacing RA between the four units under contract; (5) the inclusion of GHG offset invalidation risk on SCE; and (6) terms of curtailment. ${ }^{38} \mathrm{~A} 7^{\text {th }}$ modification was made after execution as described below.

SCE's modifications in to the CHP RFO Pro-Forma PPA and the UPF Documents are reasonable and were made without preference to its affiliate Sycamore.

Once both parties mutually agreed upon the terms of the negotiated PPA, Sycamore was permitted to submit a Final Offer that, if selected by SCE, was contractually-binding.

The second stage of evaluation considered Final Offers based on quantitative and qualitative factors. Quantitative evaluation relied on the use of net present value. For Final Offers SCE calculated the \$NPV/MW for each Offer, the net \$NPV cost of individual Offers, and net \$NPV cost for all combinations of Offers.
Qualitative factors of a project included its:

[^17]+ GHG Debit or Credit based on the accounting rules per Term Sheet Section 7, using the Semi-Annual Reporting Template developed by CPUC Energy Division;
+ Project development progress and viability for new, expanded, or repowered facilities: Environmental and permitting status; Project development experience; Site control; Electrical interconnection status;
+ Women, Minority, and Disabled Veteran-Owned Business Enterprises("WMDVBE") Status;
+ Offeror concentration, dispatchability and curtailability;
+ Cost-effectiveness of GHG reductions.
The qualitative evaluation of a project's GHG Debit or Credit is used to determine how it will contribute to the 2020 GHG Emissions Reduction Target, which SCE considered to be a procurement goal. From these evaluations SCE selected a combination of projects that met their procurement objectives.
Sycamore was selected with four other facilities for the purposes of exceeding the Target A goal of 630 MW (particularly in consideration of the 1,402 MW Target at the end of the Initial Program Period), at least $\$ / \mathrm{MW}$ cost. One other facility whose contracts were executed pursuant to the 2011 SCE CHP RFO and are pending Commission disposition are calculated to contribute GHG Credits to the Emissions Reduction Target.

Sycamore was selected due to its high-ranking net present value compared to other Facilities that qualified for Final Selection. It contributes 300 MW toward the MW Target and 95,936 MT toward the GHG Emissions Reduction Target. Per Section 4.2.12 of the Term Sheet, SCE is permitted to request offers that include dispatchability terms that differ from the CHP RFO Pro Forma PPA. The selection of Sycamore is a reasonable procurement resulting from SCE's CHP RFO. Additional analysis of the value of the PPA among other Offerors is included in the Confidential Appendix A.
Given the robust response to SCE's 2011 CHP RFO, and the relative cost effectiveness of the Sycamore offer as compared to other offers, Sycamore's procurement is of reasonable cost.

After the execution of the Agreements, SCE and Sycamore both determined the need to amend the Agreements. In the Toll Confirm, SCE identified the erroneous inclusion of a multiplier to the initial market price for on-peak pricing that would miscalculate the mark-to-market. This multiplier would inflate the
value of initial market prices compared to current market prices and therefore reduce the amount of collateral required of Sycamore for performance assurance. Reference to the multiplier was stricken from the Toll Confirm. Sycamore requested a delay in filing for CPUC and FERC approval to prevent the public release of the Agreements from negatively affecting a market opportunity for its affiliate KRCC. ${ }^{39}$ The deadlines to seek regulatory approval were extended 30 days. As discussed below, the IE found that SCE did not provide Sycamore undue preference as an affiliate in the transaction.

SCE's modifications in Sycamore Amendment No. 1 are reasonable and were made without preference to its affiliate Sycamore.

## 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.
The Agreements are between Southern California Edison Company and Sycamore. The Commission's general jurisdiction extends only over SCE, but not Sycamore. Based on the information before us, these Agreements do not appear to result in any adverse safety impacts on the facilities or operations of SCE.

## Project Viability

Sycamore owns an existing qualifying cogeneration facility. Sycamore has been contracted with SCE since 1984. Sycamore began deliveries to SCE in 1987. Under Transition PPA Agreements amended to incorporate Additional Dispatchable Capacity executed in 2012, Sycamore was expected to reduce electricity deliveries due to the decreasing enhanced oil recovery requirements of their steam host. Sycamore's reduction in electricity deliveries continues through the CHP PPA and Confirms, which enable increasingly dispatchable operations as a Utility Prescheduled Facility. As an existing CHP Facility, the project faces minimal project development risk. The Agreements between affiliates are

[^18]effective upon the approvals of the CPUC and Federal Energy Regulatory Commission.

Sycamore is an existing CHP facility converting to a Utility Prescheduled Facility and therefore is 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 ("APCF") greater than 60 percent.
Under the Agreements, Sycamore will operate for seven years from January 1, 2014 until December 31, 2020. Therefore this procurement qualifies as a "long term financial commitment" per D.07-01-039. The four generating units are at the same location and use the same fuel and technology but are not operationally dependent on another. Therefore the APCFs for the four units are each compared against the $60 \%$ baseload threshold. The EPS applies to generating units 1 and 3 because their APCFs are $86.0 \%$ and $86.4 \%$, respectively. The EPS does not apply to generating units 2 and 4 because their capacity factors are both $0.33 \%$. SCE has determined that units 1 and 3 are compliant with the EPS because the emissions factors for both units are $535 \mathrm{lbs} . \mathrm{CO}_{2} / \mathrm{MWh}$ and $536 \mathrm{lbs} . \mathrm{CO}_{2} / \mathrm{MWh}$, respectively.
The Agreements are subject to the EPS under D.07-01-039 because the term of the PPA is greater than five years. The EPS applies to generating units 1 and 3 , whose annualized plant capacity factors are greater than $60 \%$. The EPS does not apply to generating units 2 and 4 , whose annualized plant capacity factors are
less than $60 \%$. Based on data provided by SCE, each generating units 1 and 3 are EPS compliant with an emissions factor of less than $1,100 \mathrm{lbs} . \mathrm{CO}_{2} / \mathrm{MWh}$.

## Consistent with D.02-08-071 and D.07-12-052, SCE's Procurement Review Group ("PRG") and Cost Allocation Mechanism ("CAM") Group were notified of the CHP PPA.

SCE's PRG consists of representatives from: the Division of Ratepayer Advocates, The Utility Reform Network, California Department of Water Resources-California Energy Resources Scheduling, Coalition of California Utility Employees, the Union of Concerned Scientists, the Independent Evaluator, and the Commission's Energy and Legal Divisions. SCE's CAM Group includes PRG participants as well as certain other non-wholesale market participants of bundled service, direct access, and community choice aggregator customers.

SCE consulted with the PRG on the launch of the 2011 CHP RFO on December 7, 2011 and invited PRG members to the Offeror's Conference held January 13, 2012. SCE consulted with its PRG and CAM groups regarding its evaluation, Short Listing, and selection processes during conference calls on February 8, March 15, and May 23. On June 20, 2012, SCE presented its Final Selection of Offers to the PRG and CAM groups, which included the Sycamore Agreements.

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

## Independent Evaluator Review

SCE retained Barry Sheingold of Merrimack Energy Group, Inc. as the Independent Evaluator (" IE ") to oversee the negotiations and transactions pursuant to the CHP Program to evaluate overall merits for Commission approval of the Agreements. These agreements included the 2011 CHP Request For Offers and Transition PPAs. AL 2784-E included a public and confidential Independent Evaluator's report. In its report, the IE determined that:
i) SCE reasonably designed and fairly implemented its first CHP RFO pursuant to the Settlement Agreement. ${ }^{40}$
ii) SCE's evaluation framework and implementation of [the RFO] was fair and it provided for fair and consistent comparisons between different types of projects and different types of counterparties.
iii) SCE did not provide preferential treatment to any affiliate that participated in the RFO.
iv) SCE acted reasonably in selecting the five offers for contract award and execution.

The Independent Evaluator concludes that SCE appropriately selected Sycamore's qualifying offer and therefore recommends Commission approval of the Sycamore Agreements. ${ }^{41}$ More information on the findings of the IE Report is included in Confidential Appendix A.
The Commission agrees with the independent evaluation which finds that the Agreements between SCE and Sycamore to be competitive among other offers in the RFO and of reasonable cost.

As with the conclusions reached in Resolutions E-4569 and E-4554 the Commission does not sustain all of the judgments of the Independent Evaluator regarding SCE's determinations on the eligibility of bidders and eligibility of products from other bidders. Moreover, the Commission does not agree that the unilateral imposition of the EEI Agreements as effective "pro-forma" for UPF bids is consistent with the Settlement.
The Independent Evaluator concurs with SCE's decision to execute the Agreements with Sycamore and finds that they merit Commission approval.

## 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 $311(\mathrm{~g})(2)$ provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

[^19]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.

## FINDINGS AND CONCLUSIONS

1. Southern California Edison Company ("SCE") filed Advice Letter ("AL") 2784-E on October 1, 2012, in which it requested Commission approval of six agreements ("Agreements") with Sycamore Cogeneration Company ("Sycamore") that is based on the Combined Heat and Power Request For Offers ("CHP RFO") Pro-Forma Power Purchase Agreement approved by the Commission in Decision ("D.")10-12-035 and EEI Resource Adequacy and Unit Contingent Tolling Confirmation Letters. AL 2784-E was timely protested by Shell Energy, Marin Energy Authority, and the Alliance for Retail Energy Markets and received a late-filed response from Cogeneration Association of California. SCE replied to the protests in a timely manner.
2. Sycamore meets the definition of a Utility Prescheduled Facility, consistent with the eligibility requirements of the QF/CHP Settlement.
3. Sycamore meets the eligibility requirements to bid into the SCE CHP RFO consistent with Section 4.2.2.1 and 4.2.2.2 of the Settlement Term Sheet.
4. The Commission rejects Joint Parties' protest that Sycamore only provides Resource Adequacy Capacity. The Agreements structure Sycamore's multiunit operations to provide multiple power products as a Utility Prescheduled Facility, consistent with the requirements of the Settlement Term Sheet.
5. The 300 MW Contract Nameplate value for the Sycamore Facility will count toward SCE's MW procurement target.
6. Sycamore's operations under the Agreements as a Utility Prescheduled Facility will be significantly reduced compared to the prior two years of operations, yielding a GHG Credit of 95,936 MT toward the GHG Emissions Reduction Target.
7. Resource adequacy benefits are to be allocated according to the share of the net capacity costs paid by load-serving entities serving direct access and
community choice aggregation customers as prescribed in Section 13.1.2.2 of the QF/CHP Settlement Term Sheet.
8. The Commission rejects Joint Parties' protest to restrict allocation of costs. Recovery of a pro-rata share of the net capacity costs associated with the CHP Program from DA and CCA customers is consistent with Section 13.1.2.2 of the QF/CHP Settlement Term Sheet and is reasonable given that CCA and DA customers will benefit from Resource A dequacy.
9. 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.
10. The 2011 SCE CHP RFO received offers from a number of counterparties, providing a variety of projects and robust amount of capacity several times greater than SCE's MW Target A.
11. SCE's modifications in to the CHP RFO Pro-Forma PPA and the UPF Documents are reasonable and were made without preference to its affiliate Sycamore.
12. Given the robust response to SCE's 2011 CHP RFO, and the relative cost effectiveness of the Sycamore offer as compared to other offers, Sycamore's procurement is of reasonable cost.
13. SCE's modifications in Sycamore Amendment No. 1 are reasonable and were made without preference to its affiliate Sycamore.
14. Sycamore is an existing CHP facility converting to a Utility Prescheduled Facility and therefore is a viable project.
15. The Agreements are subject to the EPS under D.07-01-039 because the term of the PPA is greater than five years. The EPS applies to generating units 1 and 3 , whose annualized plant capacity factors are greater than $60 \%$. The EPS does not apply to generating units 2 and 4 , whose annualized plant capacity factors are less than $60 \%$. Based on data provided by SCE, each generating units 1 and 3 are EPS compliant with an emissions factor of less than 1,100 lbs. $\mathrm{CO}_{2} / \mathrm{MWh}$.
16. SCE has complied with the Commission's rules for involving the PRG and CAM groups.
17. The Independent Evaluator concurs with SCE's decision to execute the Agreements with Sycamore and finds that they merit Commission approval.
18. SCE's reliance on the EEI Agreements for Sycamore, and the Commission's adoption of the Sycamore SCE agreements, does not establish a precedent for the form of contract for future UPF or ADC agreements. SCE's unilateral establishment of a UPF "pro forma" relying upon the EEI Agreements is not consistent with the Settlement terms.

## THEREFORE IT IS ORDERED THAT:

1. The request of the Southern California Edison Company for the Commission to approve the Sycamore Agreements in their entirety as requested in Advice Letter AL 2784-E is approved without modifications.
2. Southern California Edison Company is authorized to recover the costs associated with the Sycamore Agreements through the cost recovery mechanisms set forth in D.10-12-035 (as modified by D.11-07-010), Section 13.1.2.2 of the QF/CHP Settlement, and SCE's Advice Letter 2645-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 September 5, 2013; the following Commissioners voting favorably thereon:

Paul Clanon
Executive Director

## Confidential Appendix A

Summary of 2011 SCE CHP Request For Offers
(Tracks $1 \& 2$ )
and
Analysis of the amended

1. Request For Offers CHP Power Purchase Agreement, 2. Resource Adequacy Confirmation, and 3. Unit Contingent Tolling Confirmation, with Sycamore Cogeneration Company

REDACTED


[^0]:    1 The draft Resolution approves the agreement between Southern California Edison Company (SCE) and Sycamore Cogeneration Company (Sycamore), submitted to the California Public Utilities Commission (CPUC or Commission) by Advice Letter 2784-E. SCE's Advice Letter, dated October 1, 2012, seeks approval of four agreements and two amendments pursuant to the implementation of the CPUC QF/CHP Program Settlement.

    2 The Qualifying Facility and Combined Heat and Power Program Settlement Agreement, October 8, 2010 (Settlement); adopted pursuant to Decision 10-12-035, as modified by Decisions 11-03-051 and 11-07010. See, Application of S. Cal. Edison Co. (U338E) for Applying the Market Index Formula \& As-Available Capacity Prices Adopted in D.07-09-040 to Calculate Short-Run Avoided Costs for Payments to Qualifying Facilities Beginning July 2003 \& Associated Relief, Cal. Pub. Utils. Comm'n D.10-12-035, Application 08-11001 (Dec. 21, 2010), available at http://docs.cpuc.ca.gov/word pdf/FINAL DECISION/128624.pdf. FERC also considered the Settlement as part of its evaluation of PURPA 210(m) conditions in Pacific Gas and Elec. Co., 135 FERC $\mathbb{1} 61,234$ (2011).

    3 The Settlement Term Sheet defines a UPF as "[a]n Existing CHP Facility that has changed operations to convert to a utility controlled scheduled dispatchable generation facility, including but not limited to an [Exempt Wholesale Generator]."

[^1]:    $6 \quad$ Sycamore Cogeneration Co. \& Kern River Cogeneration Co., 143 FERC $\uparrow$ 61,224, Order Dismissing

[^2]:    ${ }^{1}$ Sycamore is owned $50 \%$ by an indirect wholly-owned subsidiary of Edison Mission Group, an affiliate of SCE and $50 \%$ by an indirect wholly-owned subsidiary of Chevron Corporation.
    ${ }^{2}$ Additional Dispatchable Capacity (ADC) is addressed in the Settlement Term Sheet Section 3.4.1.2. The term specifically applies to a CHP, not a UPF project, and as an amendment to the Transition PPA. Sycamore is not providing Additional Dispatchable Capacity as that term is defined in the Settlement; rather as a UPF it is supplying dispatchable capacity consistent with a UPF operation.

[^3]:    ${ }^{3}$ Sections 5.2.3.1 and 6.4.1 of the Term Sheet defines "Existing CHP Facilities" are gas-fired Topping Cycle CHP Facilities that exported and delivered electric power to an IOU as listed by QF ID number in each IOU's July 2010 Semi-Annual Report - as "Contract Nameplate."
    ${ }^{4}$ Settlement Term Sheet at p. 76 define a Utility Prescheduled Facility as an Existing CHP Facility that has changed operation to a utility controlled scheduled dispatchable generation facility. The definition provides that a UPF is "[aln Existing CHP Facility that has changed operations to convert to a utility controlled scheduled dispatchable generation facility, including but not limited to an EWG."

[^4]:    ${ }^{5}$ Eligibility to participate in a CHP RFO is provided in Section 4.2.2 of the Term Sheet and includes CHP and UPF qualifications. Eligible power products under the Term Sheet are specified in Section 4 generally, and specific additional products in Section 4.2.12.

[^5]:    ${ }^{6}$ Per Settlement Term Sheet Section 5.1.2, each IOU allocation of the total 3,000 MW Target is divided into interval MW Targets that correspond to the three RFOs: "A," "B," and "C." SCE's 1,402 MW Target is split into 630, 378, and 394 MW for these interval Targets, respectively.
    7 http://www.sce.com/EnergyProcurement/renewables/chp/rfo.htm.
    ${ }^{8}$ The four UPF Documents include: EEI Master Power Purchase and Sale Agreement Cover Sheet ("EEI Master Agreement"); EEI Paragraph 10 to the Collateral Annex ("Paragraph 10"); Unit Contingent ("UC") Tolling Confirmation; and Resource Adequacy ("RA") Confirmation.

[^6]:    ${ }^{9}$ The Commission has now addressed determinations of "qualified" bids and products in several resolutions. The resolutions relevant to SCE addressing Calpine Los Medanos (E-4569, issued July 31, 2013), Calpine Gilroy ( $\mathrm{E}-4569$, issued July 31, 2013) and Harbor Cogeneration Company (E-4554, issued August 19,2012) determined in part that certain determinations of eligibility were in error, and that the erroneous determinations adversely affected qualified CHP and UPF bids and evaluations from the RFO. The Commission Resolutions also noted the rejection of the Independent Evaluator's assessment of these bids under the Settlement.

[^7]:    ${ }^{10}$ Protest of the Joint Parties to SCE's AL 2784-E ("Joint Parties' Protest"), (October 22, 2012), p. 3.
    ${ }^{11}$ Regarding RA Capacity-only contracts between SCE and Calpine's Los Medanos Energy Center and Gilroy CHP Facilities resulting from the 2011 CHP RFO.
    ${ }^{12}$ Joint Parties' Protest, p. 5
    ${ }^{13}$ CAC Response, p. 3.
    ${ }^{14}$ CAC Response, p. 3-6 and SCE Reply p. 3.

[^8]:    ${ }^{15}$ CAC Response, p. 6-7.
    ${ }^{16}$ SCE Reply, p. 2.
    ${ }^{17}$ SCE Reply, p. 4.
    ${ }^{18}$ SCE Reply, p. 4-5.
    ${ }^{19}$ E-4569, issued July 31, 2013, Ordering Paragraph 7, p. 28.
    ${ }^{20}$ Joint Parties' Protest, p. 4-5.

[^9]:    ${ }^{21}$ Joint Parties' Protest, p. 3.
    ${ }^{22}$ Joint Parties' Protest, p. 4.
    ${ }^{23}$ CAC Response, p. 7.
    ${ }^{24}$ SCE Reply, p. 7.
    ${ }^{25}$ Joint Parties' Protest, p. 5.
    ${ }^{26}$ CAC Response, p. 7.
    ${ }^{27}$ SCE Reply, p. 7.

[^10]:    ${ }^{28}$ 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."

[^11]:    ${ }^{29}$ See 18 C.F.R. $\$ 292.205(a)$. Efficiency is based on useful power output plus one-half of the useful thermal energy output, divided by the total energy input of natural gas and oil to the facility.
    ${ }^{30} 18$ C.F.R. § 292.205(b).
    ${ }^{31}$ Sycamore Cogeneration Co. \& Kern River Cogeneration Co., 143 FERC 61,224, Order Dismissing Filings, Docket Nos. ER13-558-000 and ER13-559-000 (Issued June 7, 2013).

[^12]:    ${ }^{32}$ State definition of cogeneration per Public Utilities Code Section 216.6. Federal definition of cogeneration per 18 C.F.R. $\$ 292.205$ implementing the Public Utility Regulatory Policies Act ("PURPA").

[^13]:    ${ }^{33}$ D.10-12-035 at p. 45-46, Sections 2.2.2, 4.2.2.2, 4.2.6, 4.3.1, 4.8, and at p. $65,74,76$.

[^14]:    ${ }^{34}$ SCE Advice Letter 2645-E. http://www.sce.com/NR/sc3/tm2/pdf/2645-E.pdf.

[^15]:    ${ }^{35}$ E-4537 at p. 15-17 and 24.

[^16]:    36 The Commission recognizes SCE's July 30, 2013 filing of Application A.13-07-XXX, Application of SCE (U 338-E) for Approval of Amendment to Power Purchase Agreement with Chevron U.S.A. Inc. related to an additional CHP facility at the Chevron El Segundo Refinery. The capacity from this project may increase the SCE procurement megawatts under the Settlement, but not prior to the closing of the CHP RFO.

[^17]:    ${ }^{37}$ IE Report, p. 40.
    ${ }^{38}$ AL 2784-E, p. 18-22 and IE Report, p. 41-43.

[^18]:    ${ }^{39}$ Per PG\&E AL 4190-E, KRCC engaged in negotiations with PG\&E regarding a UPF contract as a result of the first PG\&E CHP RFO in August 2012.

[^19]:    ${ }^{40}$ IE Report, (September 2012), p. 3.
    ${ }^{41}$ Id. at p. 51.

