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**Re: Opposition of CAC to Draft Resolution Number E-4569**

**I. Introduction.** These comments of the Cogeneration Association of California (CAC) to draft Resolution E-4569 incorporate and augment the comments and attachments of the California Cogeneration Council (CCC). CAC and CCC oppose the approval of the draft Resolution addressing Southern California Edison Company's (SCE) Advice Letter 771-E. SCE AL 2771-E seeks approval of two Resource Adequacy (RA) agreements, and accounting credit for 410.5 MWs of the total combined heat and power (CHP) capacity target obligations under the CHP Settlement.<sup>1</sup> SCE's total CHP capacity minimum obligation under the CHP Settlement is 1,402 MWs.<sup>2</sup> The draft Resolution approves the RA agreements and accounting credit of Los Medanos Energy Center, LLC (LMEC) and Gilroy Cogen, L.P. (Gilroy) under the CHP Settlement. Cogenerators oppose the crediting of RA capacity from the RA agreements for meeting the CHP Settlement capacity target obligations.

CAC does not oppose Commission approval of contracts for the procurement of RA from LMEC or Gilroy. If the two RA agreements meet RA procurement objectives established by the Commission, the Commission certainly has the discretion to approve SCE's procurement of these resources – as RA resources. The Commission should not allow SCE to count the RA agreements as capacity for the CHP procurement targets under the CHP Settlement.

CAC joins CCC in the following positions:

- Unexpected and inappropriate RA-only resources substituting for the baseload CHP opportunities fostered by the CHP Settlement must not distort the CPUC CHP program.
- The Commission has a duty and obligation to preserve the state's objectives and policies to retain efficient baseload CHP resources contemplated by the CHP Settlement and state policies supporting these resources.
- Reliance on a single passage from the CHP Settlement Term Sheet (§4.2.2.1) to sustain the eligibility of RA-only products as substitutes for baseload CHP operations distorts the Commission's CHP policies and program.
- The Commission should preclude the exploitation of an apparent ambiguity regarding eligibility that is inconsistent with multiple other provisions and decisions implementing the CHP Settlement as a baseload CHP resource program and not an RA-only resource procurement program.

<sup>1</sup> The Qualifying Facility and Combined Heat and Power Program Settlement Agreement, October 8, 2010.

<sup>2</sup> Sections 2.2, 2.3 and 5.1 of the CHP Settlement Term Sheet. SCE's MW Target A is 630 MWs; meaning the two RA agreements alone represent 65% of the total Target A CHP procurement.



- One unequivocal purpose of the CHP program is to provide viable contracting opportunities to existing and new CHP baseload generating resources that had previously been unsuccessful in securing contracts in the all-source solicitations of IOUs.<sup>3</sup>
- The Settlement is designed to support baseload CHP producing thermal and electric power to serve industrial, manufacturing and commercial facilities with material thermal needs through a cogeneration process that is balanced, integrated and highly efficient.<sup>4</sup>
- The CHP RFO Pro Forma Power Purchase Agreement adopted by the Commission as part of the CHP Settlement requires that baseload CHP resources must deliver energy and operate at very high capacity factors (95%), which is inconsistent with the performance obligations or characteristics of an RA-only product.
- The creation of viable contracting opportunities for cogeneration resources providing capacity and energy is a critical component of the FERC decision to conditionally terminate the mandatory purchase obligation pursuant to §210(m) of the Public Utility Regulatory Policies Act of 1978.<sup>5</sup>
- FERC’s decision identified the CHP Program and its contracting opportunities, as an “essential” component of the viability of suspending the PURPA Mandatory Purchase Obligation, separate and distinct from, among other features, the separate RA procurement program.<sup>6</sup>
- The PURPA fundamental use test<sup>7</sup> provides guidance regarding the procurement of real or legitimate CHP serving industrial loads, as distinguished from merchant power plants primarily designed for power market sales, and neither LMEC nor Gilroy appear to meet the fundamental use test.
- If adopted, the draft Resolution will eviscerate the CHP Settlement by eroding the intended capacity procurement of baseload CHP, and distorting pricing of CHP baseload RFO bids by substituting incomparable products.

SCE’s effort to count the RA agreements as meeting the capacity targets under the CHP Settlement opens the floodgates to “PURPA machines”<sup>8</sup> (masked as RA only products) that may be Qualifying Facilities, but are not legitimate CHP operations.<sup>9</sup> If a host facility is not relying on the sequential-use features of a cogeneration operation to meet its thermal requirements then the generation project is not a CHP facility for the purposes of the CHP Settlement.

In light of the page limits placed upon comments in this matter the CCC and CAC comments should be considered together. The CAC comments necessarily focus upon a subset of

<sup>3</sup> See D.07-09-040 at pp. 119-120.

<sup>4</sup> Term Sheet §1.2 generally, and §1.2.4.6, specifically -- “*Support for California’s manufacturing, industrial and commercial base...*”

<sup>5</sup> 135 FERC ¶ 61,234 at p. 24.

<sup>6</sup> *Id.* at p. 11.

<sup>7</sup> 18 CFR Part 292.205(d)(3).

<sup>8</sup> Disfavored facilities that obtained QF status in order to secure PURPA must-take and avoided cost prices from the IOUs assertedly without a “legitimate” industrial, manufacturing or commercial use.

<sup>9</sup> The floodgates are already opening in light of the pending PG&E Advice Letter 4074-E requesting approval of 280.5 MWs of LMEC capacity as CHP and PG&E’s open solicitation of RA-only products for its second CHP RFO.



challenges to the draft Resolution in light of the page limitations. The issues addressed are: (a) the known operating characteristics of LMEC and Gilroy in contrast to CHP characteristics as well as the implications of the fundamental use test related to the purpose and objectives of the CHP Settlement; (b) relevant provisions of the CHP pro forma PPA adopted by the Commission revealing the intent to procure baseload CHP; (c) distortions to capacity accounting under the Settlement and to CHP RFO pricing resulting from RA-only products competing with the baseload CHP product; and, (d) the CHP Program should not be a vehicle to address shortcomings in the RA procurement process.

## II. Discussion.

**A. *The Proposed RA Operations are Not CHP Operations for the Purposes of the CHP Settlement.*** Neither LMEC nor Gilroy is required to operate to meet the thermal demands of their “hosts.” The LMEC and Gilroy facilities were designed, or modified, respectively, to serve industrial “hosts” by providing thermal energy by auxiliary boilers – not the operation of the cogeneration facility. In the case of LMEC, the IOUs did not include LMEC as a potentially affected QF in its required notice under PURPA §210(m). The IOUs’ action reveals that LMEC was not considered a CHP operation. LMEC self-certified as a QF on October 31, 2000, but never sold any generation under a QF contract and is not listed in any cogeneration reports. LMEC has a 250,000 lbs/hr auxiliary boiler that presumably serves the “host” thermal needs when the plant is not operating and producing electric and thermal energy. LMEC became commercially operational in September 2001; for the primary purpose of providing merchant power. Publicly available data reveals that LMEC produces 190 MMBtu/hr of thermal energy for sale to its neighbors. If LMEC were a thermally balanced CHP unit operating at a high overall efficiency, it would produce, at most, 190 MMBtu/hr of electricity, or about 56 MWs.<sup>10</sup> LMEC’s electric generating capacity is ten times the CHP thermal match capacity revealing that the facility was developed primarily as a merchant plant, and not as CHP.

In December 1999, Gilroy, after operating as a CHP, accepted a negotiated termination and ratepayer funded buy-out of its PURPA contract and relinquished its CHP operations for its host, presumably by installing auxiliary boilers.<sup>11</sup> Gilroy undertook this action of its own accord; its contract was not terminated or terminating on its terms. In short, the “host” facilities for LMEC and Gilroy are not dependent upon the operation of cogeneration facilities to meet their thermal or electrical needs. This is not a CHP operation.

The PURPA fundamental use test provides indicia of the CHP resources the Commission’s CHP procurement policies and the Settlement embrace. That test distinguishes between a generation facility primarily devoted to power market sales and a cogeneration facility primarily devoted to industrial purposes. LMEC and Gilroy fall into the former category, and should not be considered for the purposes of meeting the MW targets for CHP capacity under the

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<sup>10</sup> Based on the standard conversion of 3.413 MMBtu equals one MWh. Assuming a representative combustion turbine heat rate of 11,000 Btu/ kWh, the total efficiency of such a CHP unit would be 62%, consistent with the threshold 60% efficiency targeted by the CHP Settlement.

<sup>11</sup> PG&E Advice Letter 1906-E; Resolution E-3643, December 2, 1999.



Settlement. These facilities do not meet the policy objectives of the state regarding legitimate baseload CHP, the industrial service focus of the fundamental use test, and thereby, the intended purposes of the CHP Settlement. LMEC and Gilroy may be QFs by technical standards, but they are not baseload CHP operations that should count for meeting CHP procurement targets.

**B. Relevant Provisions of the CHP Pro Forma PPA Adopted by the Commission Reveal the Commission’s Intent to Procure Baseload CHP.** Decision 10-12-035, adopts the Settlement Agreement,<sup>12</sup> which states, “*in any event there is any conflict between the terms and scope of the Term Sheet on contract issues and the attached PPAs (Exh. 1-7), the PPAs shall govern.*”<sup>13</sup> Given the claimed ambiguity over eligibility and conflict over the interpretation of the Term Sheet, the CHP RFO PPA provisions are important and instructive.

Several features of the CHP Pro Forma PPA demonstrate the Settlement objective to secure baseload CHP resources and not RA-only operations. Section 1.01 and Exhibit D of the PPA establish strict and material standards for capacity factors and availability.<sup>14</sup> The PPA requires at least a 95% capacity factor for the CHP operations, rather than an “availability factor” applicable to RA. The capacity factor requires a high level of operation and delivery of energy, which is associated with baseload CHP operation supporting integrated and dependent thermal host loads. The PPA provides for the procurement of “Power Products,” which include firm and as-available capacity and all electrical energy produced by the CHP facility, not simply RA. Further, the RA Benefits under the PPA are an additional power product (defined as a Related Product) associated with contract capacity resulting from the delivery of energy from the cogeneration process.<sup>15</sup> The CHP resources contemplated the delivery of capacity and energy as a cogeneration process with RA an additional “Related Product,” not the primary product.

**C. RA-only Products Competing with the Baseload CHP Product Distorts both Capacity Target Accounting and CHP RFO Pricing under the Settlement.** A baseload CHP resource, consistent with the capacity factors in the CHP Pro Forma RFO, must operate to serve the thermal demands of their hosts. These facilities cannot provide an RA-only product, and cannot realistically compete with an RA-only product. The RA-only facility simply needs to be “available” and it may never actually generate electric and thermal power. In contrast, a baseload CHP must operate and deliver both thermal and electrical power – and not simply “availability” for RA. This places the CHP resources contemplated by the Settlement in a lose-lose paradigm. First, the CHP procurement capacity is distorted by RA-only capacity undermining the CHP procurement targets, and leaving the baseload CHP at a loss to fit as intended under the CHP Settlement procurement targets. Second, the prices for evaluation under the bid are not comparing baseload CHP against baseload CHP, but rather to an entirely different and less costly product. The distortion in the bid evaluation is that every

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<sup>12</sup> D.10-12-035 at p. 12.

<sup>13</sup> D.10-12-035, Attachment A, Settlement Agreement at p. 6.

<sup>14</sup> See attachment entitled “Performance Sections in CHP Pro Forma RFO Agreement.”

<sup>15</sup> CHP Pro Forma PPA, Exhibit A.



baseload CHP would be more costly than an RA-only product. The implications for the bid process, the procurement of resources and the comparison of products are dramatic, as revealed by the results of SCE's first CHP RFO. Only a single baseload CHP facility, Berry Petroleum, successfully presented a bid. A second facility, Sycamore Cogeneration Company, presented a successful combined CHP and UPF bid that reflects the anticipated success of UPF bidders. However, every other SCE-selected successful bidder is an RA-only proposal. The Commission should remedy this distortion of the CHP Settlement objectives by simply rejecting the RA-only capacity as counting against the CHP Program targets. The integrity of bid selections of the past RFOs, the accounting relative to the current targets, and the proper scope of the pending PG&E RFO as well as future CHP RFOs depends upon a prompt and conclusive action from the Commission on this matter.

**D. The CHP Program should not be a vehicle to address shortcomings in the RA procurement process.** In the Commission's proceeding dedicated to establishing a preferred policy for resource adequacy, the Commission declined to add a multi-year forward commitment to the RA program.<sup>16</sup> Indeed, short-term, annual RA acquisition prevents planning, reliable revenue streams and reasonable assurances of cost recovery. These issues should and can be addressed, but not by cannibalizing the CHP Program. Moreover, the LMEC and Gilroy operations should not bypass the RA procurement process, which now has advice letters seeking five-year terms for 3,800 MWs of SCE RA procured resources.<sup>17</sup> The RA agreements with LMEC and Gilroy have seven and five year terms, respectively.<sup>18</sup> To assert that the Commission expected or intended that the CHP solicitation is the appropriate vehicle to enter into these long-term RA-only agreements is not tenable.

**III. Conclusion.** The promise of the Commission's CHP Program is to provide a viable and real alternative for existing and new baseload CHP that could not provide dispatchable resources sought by the IOU all-source "market" solicitations. Substituting LMEC and Gilroy RA capacity for the CHP procurement target capacity distorts the CHP Settlement and the Commission's CHP policies. For all the reasons presented in these comments, and the incorporated comments from CCC, the Commission should decline to adopt the draft Resolution and disallow the counting of LMEC and Gilroy capacity under the CHP Program.

Respectfully submitted,

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<sup>16</sup> D.10-06-018 at pp. 32-33.

<sup>17</sup> SCE Advice Letter 2853-E, February 15, 2013.

<sup>18</sup> Draft Resolution at p. 3.

Performance Sections in CHP Pro Forma RFO Agreement

- 1.01 Capacity Performance Requirements. As further described in Exhibit D, if the Generating Facility elects to provide Firm Contract Capacity, then the Generating Facility must have a minimum Firm Contract Capacity performance requirement of 95% to earn the Maximum Firm Capacity Payment and a minimum Capacity Performance Requirement of 60% to earn any portion of the Maximum Firm Capacity Payment.

Exhibit D Section 3.(n)

Factor “APF” in Section 3(g) of this Exhibit D. The Availability Penalty Factor for each monthly TOD Period is calculated as follows:

$$\text{AVAILABILITY PENALTY FACTOR} = \underline{1.0 - 2.0} \times (\underline{\text{CR} - \text{ACF}})$$

Where:

APF = The greater of: (i) zero; and (ii) the result of the above equation for APF.

CR = 95%, the minimum Capacity Performance Requirement.

ACF = The Availability Credit Factor determined in accordance with Section 3(i) of this Exhibit D.

Exhibit D Section 3.(i)

- (i) Factor “ACF” in Section 3(g) of this Exhibit D. The Availability Credit Factor for each monthly TOD Period is calculated as follows:

$$\text{AVAILABILITY CREDIT FACTOR} = (\text{ECH} + \text{CCH}) / \text{PH}$$

Where:

ECH = The total number of Earned Capacity Hours, determined in accordance with Section 3(j) of this Exhibit D.

CCH = The total number of Capacity Credit Hours, determined in accordance with Section 3(m) of this Exhibit D.

PH = The total number of hours in the TOD Period (period hours).

- (j) Factor “ECH” in Section 3(i) of this Exhibit D. The Earned Capacity Hours for each monthly TOD Period is calculated as follows:

$$\text{EARNED CAPACITY HOURS} = \text{FE} / \text{FCC}$$

Where:

FE = The sum of the Firm TOD Energy from the Generating Facility for all hours of the TOD Period, as determined in Section 3(k) of this Exhibit D, in kWh.

FCC = The Firm Contract Capacity for all TOD Periods during a month is the amount in Section 1.02(d) in kWh per hour.

- (k) Factor “FE” in Section 3(j) of this Exhibit D. The Firm TOD Energy for

Performance Sections in CHP Pro Forma RFO Agreement

each TOD Period of any month is calculated as follows:

$$\text{FIRM TOD ENERGY in kWh} = \sum_{\text{FirstHour}}^{\text{LastHour}} (\text{E})_{\text{Hour}}$$

Where:

E = The lesser of: (i) Metered Energy for the applicable hour in kWh; and (ii) Allowed Firm Energy, as determined in Section 3(l) of this Exhibit D, in kWh.

First Hour = First hour of the applicable TOD Period.

Last Hour = Last hour of the applicable TOD Period.

Metered Energy for any hour is equal to the sum of Metered Energy for all Metering Intervals in that hour.

- (l) Factor “E” in Section 3(k) of this Exhibit D. The Allowed Firm Energy is calculated as follows:

$$\text{ALLOWED FIRM ENERGY in kWh} = 1 \text{ hour} \times \text{FCC}$$

Where:

FCC = The Firm Contract Capacity set forth in Section 1.02(d).