

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

Order Instituting Rulemaking to Integrate
and Refine Procurement Policies and
Consider Long-Term Procurement Plans.

R.13-12-010

**REPLY COMMENTS OF COGENERATION ASSOCIATES OF CALIFORNIA AND
ENERGY PRODUCERS AND USERS COALITION ON
PLANNING ASSUMPTIONS**

Pursuant to the Assigned Judge's Ruling of December 19, 2013, the Cogeneration Association of California¹ and the Energy Producers and Users Coalition² (CAC/EPUC) provide these reply comments. These comments reply to the proposal by the Union of Concerned Scientists that the assumptions provide for no growth in CHP under any scenario.³ This is an unreasonable, unsupported proposition for several reasons.

First, these are assumptions, not final policy decisions. As many parties state,⁴ the assumptions should provide for a range of potential futures, so that the Commission is well-informed as to the consequences of a variety of policy directions. Whether the

¹ CAC represents the combined heat and power and cogeneration operation interests of the following entities: Coalinga Cogeneration Company, Mid-Set Cogeneration Company, Kern River Cogeneration Company, Sycamore Cogeneration Company, Sargent Canyon Cogeneration Company, Salinas River Cogeneration Company, Midway Sunset Cogeneration Company and Watson Cogeneration Company.

² EPUC is an ad hoc group representing the electric end use and customer generation interests of the following companies: Aera Energy LLC, Chevron U.S.A. Inc., ExxonMobil Power and Gas Services Inc., Phillips 66 Company, Shell Oil Products US, Tesoro Refining & Marketing Company LLC, THUMS Long Beach Company, and Occidental Elk Hills, Inc.

³ *Comments Of The Union Of Concerned Scientists On Additional CHP Comments*, Docket R.13-12-010, January 8, 2014.

⁴ *Response of Calpine*, p. 2; *Comments of the Vote Solar Initiative*, p. 1; *Comments of the Union of Concerned Scientists and Sierra Club*, p. 6; *Comments of Pacific Gas and Electric Co.*, p. 3.

UCS position regarding CHP is ultimately approved, the Commission should be informed as to the consequences of building some range of new CHP facilities.

Second, the UCS position is directly contrary to the well-settled policy of this state.⁵ It has been determined that CHP is to be encouraged because it provides a more efficient delivery of both industrial thermal energy and electricity. These mandates include:

- **California Public Utilities Code Section 372(a):**
“It is the policy of the state to encourage and support the development of cogeneration as an efficient, environmentally beneficial, competitive energy resource that will enhance the reliability of local generation supply, and promote local business growth.”
- **Energy Action Plan II** (and updates) –California’s energy supply must be: reliable, affordable, technologically advanced, environmentally sound (i.e. meet AB 32 goals), and safe.
- The state’s electric supply “**Loading Order**”:
 1. Energy efficiency and demand response.
 2. Renewables and DG, *including clean and efficient CHP.*
 3. Clean, efficient fossil generation.
- **CARB 2008 Scoping Plan** goal of 4 GW of new CHP by 2020.
- **Governor Jerry Brown’s energy goals** include:
 1. Develop 12 GW of new distributed generation.
 2. Install 6.5 GW of new CHP over 20 years.
- **2013 Updated Scoping Plan** (draft):
*“Despite these policy actions and incentives for CHP, significant installation barriers for CHP systems still remain and very few new CHP systems have been installed since the Scoping Plan. Indeed, due to older system retirements, the State’s overall CHP capacity may be lower now than it was in 2008. **ARB is committed to working with the CPUC and CEC to ensure the Scoping Plan goal of 4,000 MW of new CHP is achieved by 2020, and that Governor***

⁵ See, also, *Clean Coalition’s Comments*,, p. 5; *Comments of the Natural Resources Defense Council*, p. 5.

Brown's goal for 6,500 MW of additional installed capacity can be met by 2030.⁶

*"Looking beyond 2020, California will need to continue to transform the energy sector with wholesale changes to its current electricity and natural gas systems. Developing a near zero emission strategy for the energy sector will require efficient next-generation technology; vast new low carbon generation resources; a robust transmission and distribution infrastructure; and carbon capture, utilization, and sequestration for the remaining fossil generation."*⁷

• **CEC 2013 Draft IEPR:**

*The Combined Heat and Power: 2011-2030 Market Assessment identified 8,518 MW of installed CHP at the end of 2011 and indicated that cumulative market penetration for new CHP in 2030 varies between 1,888 MW and 6,108 MW. Existing capacity has decreased by roughly 330 MW with the closure of some CHP facilities that used coal or petroleum coke, as well as the economic closure of the Campbell's Soup plant in Sacramento.*⁸

The Commission should continue its historical commitment to preferred resources by ensuring in this docket that a full range of options for such preferred resources, and particularly CHP, is considered.

Third, not only is the proposition contrary to state policy, it is contrary to the very explicit procurement mandate in the QF/CHP Settlement. As CAC and EPUC stated in their opening comments, there remain 1253 MW to be procured by the IOUs under the terms of the Settlement. That obligation must be honored. Additionally, there are other procurement authorizations granted by this Commission in Tracks I and IV of the 2013 LTPP proceeding⁹ which also much be completed.

Fourth and finally, the "back of the envelope" analysis by UCS is unscientific and unreasonable. It suffers from several fundamental defects. First, it assumes that all the existing CHP facilities remain in service until 2050. Many of those facilities have been

⁶ *Climate Change Scoping Plan First Update (draft)* at p. 30.

⁷ *Climate Change Scoping Plan First Update (draft)* at p. ES-4.

⁸ CEC 2013 Draft IEPR at 172.

⁹ R.12-03-014.

in operation since the early 1990s, and although they may be exceptionally reliable, it seems unreasonable to assume they will be in service for another 36 years. Many of the existing facilities in the UCS total will either be retired or re-powered with more efficient units. Additionally, the new CHP facilities that would be built under the assumptions will also be more efficient than existing units.

Second, the analysis does not provide any consideration for the requirements of the industrial hosts. The steam or other thermal energy to supply the industrial processes of these facilities will have to be supplied, and if the CHP unit was not built under the UCS proposition, the industrial facility would have to install its own boilers providing thermal energy much less efficiently, and at an additional cost. The UCS analysis does not consider the cost, the additional energy or the additional GHG emissions from separate thermal and electric generation.

Third, the UCS analysis fails to consider the need for some gas-fired generation to provide regulation and integration services for renewables. UCS makes no recommendation for how such flexible capacity should be provided, and fails to consider that CHP may be the most efficient gas-fired resource to provide such capacity. A simple analysis demonstrates that a typical CHP unit generates a MWh of electricity with 0.1 metric tons of CO₂ emitted, while a combined cycle plant with a 6900 heat rate produces 0.37 tons of CO₂ to generate the same MWh. A simple cycle turbine produces 0.47 tons. The CHP unit is clearly an important option in providing capacity to the system.

For these reasons, the proposition of UCS to remove any assumptions for CHP growth should be summarily rejected, and the expanded planning assumptions as proposed in CAC and EPUC's opening comments should be approved.

Respectfully submitted,

ALCANTAR & KAHL LLP

A handwritten signature in black ink that reads "Donald Brookhyser". The signature is written in a cursive style and is positioned above the typed name and contact information.

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