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California Energy Commission
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12-IEP-1D
TN # 67971
OCT 19 2012

Attn: Mr. Bryan Neff
California Energy Commission
1516 Ninth St, MS-43
Sacramento, CA 95814-5512

Dear Mr. Neff:

On behalf of the U.S. Department of Energy (DOE) Pacific Region Clean Energy Application Center (Pacific CEAC), I respectfully provide these comments on the recent staff report #200-2012-005 "A New Generation of Combined Heat and Power: Policy and Planning for 2030." The Pacific CEAC looks forward to the opportunity to continue to work with the Energy Commission and other state agencies to advance the development of CHP, district energy, and waste heat to power (WHP) in California, and to advance the goals and plans articulated in the staff report.

For background, I currently serve as Director of the Pacific CEAC and work with my colleagues at the University of California – Berkeley, the University of California – Irvine, San Diego State University, and San Francisco State University to provide education and outreach and direct project assistance for combined heat and power (CHP), district energy, and waste heat-to-power solutions for the Pacific Region of California, Nevada, and Hawaii. The Pacific CEAC and other regional CEACs are managed out of the Advanced Manufacturing Office at DOE headquarters in Washington, D.C. The Pacific CEAC appreciates the opportunity to provide these comments.

Our comments are as follows:

Chapter 1:

Suggested additional word:

"To reach these goals California has established an incentive program, approved feed-in tariffs, amended interconnection procedures numerous times, and implemented a new procurement process for the state's investor-owned utilities (IOUs)."

Chapter 2:

Probably good to mention PURPA directly in the first sentence, with ", namely the … (PURPA)."

Page 20 – maybe some mention here of the 7 and 12 year contracts being much less than typical financing period for CHP systems (15-25 years) as is discussed later in the report, and unclear how these were established

Suggested additional word:

"Facilities of no more than 20 MW will continue to have 100 percent RMTG scheduling priority status."

Chapter 3:

Apparent typo in this sentence:

"AB 1613 contracts are available for facilities greater than 500 kW, and the contracts for facilities no more than 500 kW have been submitted for CPUC approval as well."

Chapter 4:

Suggest wording change – CHP systems can "pay off" after just a few to several years, but then can yield positive NPVs with longer time periods of operation up to the full life of the equipment (typically 20 – 30 years).

"In addition, it is unknown if the contract payment and the short life of the QF Settlement contracts will be enough of an incentive to induce private CHP investors to invest in expensive new projects that will take 20 or 30 years to pay off for project benefits to be maximized."

Chapter 5:

This sentence is a bit awkwardly phrased, suggest a wording change:

"No single barrier can take credit for preventing CHP development; it is the culmination of these numerous barriers that do."

"No single barrier is solely responsible for preventing CHP development; however, the combination of multiple barriers is clearly hindering the development of CHP in California at a time when it has been targeted for significant expansion."

Chapter 6:

Suggest small wording change to improve clarity:

"This Hence, the expected new capacity does not come close to the Governor's goal."

Page 50 – why would CHP need to be curtailed exactly, necessitating back-up boilers? This could be explained a bit better for clarity.

Page 50 – "…that make project financing a much larger issue." Larger than what/when? Perhaps "a critical issue" would read better.

Page 50 – suggest adding two commas to offset phrase in middle of sentence that starts "The state's inconsistency…"

Page 50 – suggest "may" instead of "will" in sentence that starts "However, reducing risk…" as will sounds too certain in this context.

Page 51 – might note that cap and trade is a "disincentive to invest in clean, efficient CHP, especially for systems over a few MW."

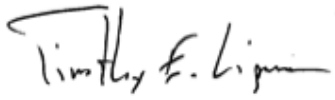
Page 52 – NEM discussion would read a little better if it were made clear that for most, NEM implies being credited for full retail price for power provided to the grid. This is a small subsidy for those systems, at the expense of other rate categories. An alternative to NEM is "co-metering" as in the implementation of AB1613, where exported CHP power would receive a "fair" price but somewhat lower than full retail at the site to account for the wires costs of delivering power to the site. This could (and is) captured as a standby charge, waived for most NEM sites, so it should be assessed in this context.

A further general comment, related to the section of the report on standby and departing load charges, is that an additional recommendation that the state might consider the is the appointment of a "distributed generation rates and charges" official of the state government. This individual would be able to help determine fair rate practices among the IOUs, as well as helping to advise MUNIs and POUs on the issue. This California "DG Utility Rates Ombudsperson" would work with the CPUC Office of

Ratepayer Advocates and other state agencies to apply principles of utility class "ratepayer indifference" as well as fair and just principles for the application of standby and departing load fees during the CPUC utility general rate case proceedings.

In summary, we are strongly in support of the thrust of this staff report and the need to revisit several key issues related to CHP development in California at this critical juncture. We look forward to working with the Commission and other stakeholders to address the issues raised in the staff report, and to help to ensure that California meets its important CHP goals.

Respectfully submitted on behalf of the Pacific CEAC,



Timothy Lipman, PhD
Director

Note: The Pacific CEAC is operated by UC Berkeley, UC Irvine, San Diego State University and San Francisco State University, for the U.S. Department of Energy and the California Energy Commission. Principal researchers include Dr. Tim Lipman and Prof. Dan Kammen (UC Berkeley), Dr. Vince McDonell and Prof. Scott Samuelsen (UC Irvine), Prof. Asfaw Beyene (SDSU), and Prof. Ahmad Ganji (SFSU).