



January 24, 2008

Steve Church
Research Division
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Re: PG&E Comments on Draft ETAAC Report

Dear Mr. Church,

These reply comments are offered on behalf of the Energy Producers and Users Coalition and the Cogeneration Association of California (EPUC/CAC). EPUC/CAC previously filed comments on the ETAAC Report Discussion Draft, (ETAAC Draft Report), a copy of which is attached for your reference. While no new comments are offered at this time, this reply addresses the comments and recommendations made by PG&E.

PG&E specifically makes five recommendations in its comments. Many of the statements that support its recommendations are misleading and inaccurate. Accordingly, the following discussion identifies the inaccuracies in PG&E's comments and suggests the general need to consider supporting documentation before giving weight to PG&E's recommendations.

PG&E Statements Regarding Benefits of Larger CHP Should Be Disregarded Due to Lack of Support

PG&E states that the ETAAC Draft Report should not consider targets and qualifying criteria for larger combined heat and power (CHP) mainly on the grounds that "*large generators [] offer little or no benefit over baseload combined cycle power plants.*" This is the type of claim that requires support using actual operational data. PG&E, however, neither provides data nor references any sources of data that would demonstrate that this claim is true. Notably, PG&E's own testimony, provided in the CPUC's 2006 Long Term Procurement Proceeding, clearly recognizes the efficiencies achieved by large CHP. PG&E stated that large CHP facilities at enhanced oil recovery fields with large thermal loads "*generally have high efficiencies*".¹ PG&E's testimony goes on to note that large CHP facilities at refineries produce "*high-efficiency CHP based export electrical output.*"² In addition to existing data, Energy and Environmental Economics, Inc.

¹ Exhibit 18 in R.06-02-013, 5-12: 4-5 (PG&E Testimony, Alvarez).

² *Id.*, at 5-22: 15.

is considering precisely this type of data in the CPUC Rulemaking 06-04-009 GHG modeling effort. Accordingly, until supporting data can be referenced, PG&E's recommendation should be disregarded.

PG&E Recommendations Regarding Report's Discussion of Self-Generation Are Misleading

PG&E disagrees that state and utility policies have discouraged self-generation CHP. Instead it asserts that state and utility policy provide CHP a "*number of benefits*" including favorable gas transportation prices, favorable buy-back rates for surplus power under must-take arrangements, exemptions from some of the non-bypassable charges (NBC), and Assembly Bill (AB) 1613. PG&E's statements are misleading because they fail to disclose the NBCs that do apply to large CHP and discourage the use of self-generation.

Despite some exemptions, CHP facilities are responsible for the following NBCs:

- (1) California Department of Water Resources Bond Charge;
- (2) Nuclear Decommissioning Charge;
- (3) Public Purpose Program Charge;
- (4) Cost Allocation Mechanism (CAM); and
- (5) Procurement Charge.

These NBCs not only range in materiality and predictability, but two are presently unquantifiable and nearly all are subject to change over time. Due to these NBCs, it is reasonable for the report to say that state and utility policy have "*discouraged the full penetration of cost-effective CHP into the industrial and commercial sectors.*"³

PG&E Overstates Benefits Available to CHP

To support its claim that state policy provides benefits to CHP, PG&E identifies the following benefits:

- Favorable gas transportation prices;
- Favorable buy-back rates for surplus power under must-take arrangements;
- Exemptions from NBCs; and
- AB 1613.

PG&E's characterization, however, overstates the benefits available to CHP. First, the buy-back rates highlighted by PG&E are rates that are based on utility avoided cost. In other words, the utility purchases qualifying facility power based on what the utility would have paid for other resources. As such, characterizing QF CHP

³ ETAAC Draft Report, at 4-4 (emphasis added).

payments as “favorable” is a reach and improperly suggests a payment of more than is due. Second, as noted above, while CHP is exempt from some NBCs, it continues to be subject to five NBCs. Of these, the unquantifiable utility procurement charge and CAM charges present the most significant threat to CHP. Finally, AB 1613 is available only to small-scale CHP; plants above 20MW qualify for none of these benefits.

PG&E’s Recommendation to Limit Recognition of CHP Resources as Energy Efficiency Measures Is Not Substantiated

The ETAAC draft report states that in order to expand small and large scale CHP, the state should consider recognizing CHP as an energy efficiency (EE) measure in California’s electricity supply loading.⁴ PG&E disagrees with this recommendation on the basis that “*CHP is not energy efficiency.*” PG&E’s position is surprising. First, as observed by the 2005 Integrated Energy Policy Report, the efficiency of CHP is well-recognized:

- *The most efficient and cost-effective form of distributed generation is cogeneration or combined heat and power. By recycling waste heat, these systems are much more efficient than systems that separately serve thermal and electric loads. They are also considerably more efficient than almost all conventional gas-fired power plants.*⁵
- *Cogeneration, or combined heat and power (CHP), is the most efficient and cost-effective form of DG, providing numerous benefits to California including reduced energy costs, more efficient fuel use, fewer environmental impacts, improved reliability and power quality, locations near load centers, and support of utility transmission and distribution systems.*⁶

Second, as reflected in CPUC Decision 07-10-032, when adopting a long-term framework for a state-wide EE program, PG&E’s sister utilities saw a place for CHP as an EE measure.

*SCE proposes to combine market demand response and cogeneration programs with energy efficiency offerings in the industrial sector. SDG&E/SoCalGas agrees that the industrial sector presents huge opportunities for energy efficiency, but argues for a focus on higher incentive payments and liberalized Commission policies on free-ridership, along with efficiency gains from combined heat and power.*⁷

⁴ ETAAC Draft Report, at 4-5.

⁵ 2005 Integrated Energy Policy Report, at 3.

⁶ 2005 IEPR, at 76.

⁷ CPUC Decision 07-10-032, at 55.

In short, contrary to PG&E's assertions, there is ample basis to consider CHP as an energy efficiency resource.

PG&E Statements Regarding Status of Departing Load Charge Exemption Is Misleading

PG&E disagrees with the ETAAC Draft Report's recommendation to exempt CHP from utility departing load charge. It also suggests that a viable carbon market will improve CHP project economics. Accordingly, PG&E recommends that the following sentences be inserted into the draft report:

California legislature and the CPUC have determined that CHPs should not be exempt from certain fees (such as departing load charges) that are incurred on their behalf and that would otherwise be borne by other California ratepayers. If the state creates a viable carbon market, the question of additional subsidy may go away, as many more CHP projects can capitalize on the carbon value to improve project economics without ratepayer subsidy.

This recommendation must be rejected because the proposed insertion is inaccurate on many grounds. First, while the CPUC has previously decided not to exempt CHP from some departing load charges, some of the departing load charges are again under consideration in the pending Track 3 of the CPUC's 2006 Long-Term Procurement Proceeding (Rulemaking 06-12-013). Second, unlike an investor-owned utility such as PG&E which can pass its costs through to ratepayers, it is not clear whether CHP facilities will be able to recover all of the costs associated with new GHG regulations. As such, there is no basis to believe that a carbon market will *improve* project economics. Finally, as EPUC/CAC have discussed in previous comments, installation of CHP increases on-site emissions even though it lowers global emissions. As a result, CHP operators would bear increased emissions costs when compared with those facilities relying on utility services. Until the full GHG regulatory scheme is established, therefore, the impact of the regulations on CHP economics will not be clear.

In place of PG&E's recommended statement, it would be more accurate to state the following:

California legislature and the CPUC have determined that CHPs should not be exempt from certain fees (such as departing load charges). Exemption from other charges is under review by the California Public Utilities Commission. ~~that are incurred on their behalf and that would otherwise be borne by other California ratepayers. If the state creates a viable carbon market, the question of additional subsidy may go away, as many more CHP projects can capitalize on the carbon value to improve project economics without ratepayer subsidy.~~

Steve Church, CARB
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We are available to discuss these and other CHP issues at your request.

Very truly yours,

A handwritten signature in cursive script that reads "Evelyn Kahl". The signature is written in black ink and is positioned above the printed name.

Evelyn Kahl