



**CALPINE®**

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November 20, 2007

**Pam Burmich**  
Air Resources Board  
Climate Change Reporting Section  
1001 I Street, Box 2815  
Sacramento, CA 95812  
(916) 323-8475

**RE: Comments on proposed regulation for the mandatory reporting of greenhouse gas emissions.**

Calpine appreciates this opportunity to comment on the "Regulation for the Mandatory Reporting of Green House Gas Emissions". Calpine Corporation is a major North American power company delivering clean, reliable and fuel-efficient power to its customers in 18 U.S. States. Calpine owns and operates 22 gas-fired power plants with electrical output greater than 20 MW and 19 geothermal power plants in the state of California, and additionally operates as an Energy Service Provider (ESP) in the state which would be affected. Calpine supports the approach that CARB has taken in these regulations and only has some minor comments to ease implementation at our facilities and make the reporting more consistent with existing reporting requirements.

Calpine has comments in the following areas:

- 95111 (i) (2) Calculation of Fugitive CO<sub>2</sub> Emissions from Geothermal Generating Facilities
- 95112 (a) (4) (D-F) Data requirements and Calculation Methods for Cogeneration Facilities for Thermal Energy Production
- 95131 (b) (4) Requirements for Verification Services/Site visits

**95111 (i) (2):**

Calpine believes that a one tiered approach for the approval of the testing plans and approval of the emission factor would be more effective than a two tiered approach of having both the local Air Pollution Control District and the Air Resources Board approve the factors. Having a two tiered approval process will be burdensome and time

consuming and will likely not be completed by the time we need to start collecting data in January 2008. In addition, we have removed the word source prior to tests in two locations. Source testing assumes that certain procedures for stack testing will be followed. The testing conducted to determine site specific emission factors for geothermal may or may not be conducted at a stack and be source testing. Some of the testing conducted to determine the site specific factors may be conducted in a pipe and may not be considered source testing although is very effective in determining a site specific factor.

(2) Operators of geothermal generating facilities may calculate CO<sub>2</sub> emissions using a source specific emission factor derived from ~~source~~ tests conducted under the supervision of local air pollution control districts/air quality management districts ~~and~~ or approved by ARB. Once the ~~source~~ test plan has been approved by ~~ARB~~, the ~~source~~ test procedures shall be repeated in future years to update the source specific emission factors annually. In the absence of source specific emission factors approved by ARB or the local air pollution control district/air quality management district, the operator shall use the method specified above in 95111(i)(1).

**95112 (a)(4)(D-F):**

The mandatory reporting regulation draft currently requires the reporting of the useful thermal output, amount of thermal energy sold off-site and the amount of thermal energy consumed on-site. This data is then used to calculate the distributed emissions from a cogeneration facility. This is consistent with the Power and Utility Reporting Protocol (PUP) issued by the California Climate Action Registry. To reduce the reporting burden, Calpine recommends deleting the requirement of reporting HRSG data since it is inconsistent with the PUP and the additional data will not be used in the calculation for distributed emissions.

**95131 (b)(4):**

The regulation states that the verification team shall at a minimum make one site visit to each facility for which an emissions data report will be submitted. Calpine has 41 geothermal, simple cycle, and combined cycle power plants in the state of California. The cost of visiting each site for a verification team would not be cost effective. Each subset, geothermal, simple cycle, and combined cycle plants have similar methodologies of calculating emissions and each facility emissions will be calculated consistently.

Calpine recommends that a sampling/percentage of each type of facility be visited each three year reporting cycle. To visit each facility would be overly burdensome and not cost effective.

Thank you for the opportunity to comment and participate in this public process. The staff of the Air Resources Board has done a great job of soliciting comments and responding to stakeholders. If you have any questions or require more information, please contact me at 925-570-0849.

Sincerely,

A handwritten signature in black ink that reads "Barbara McBride". The signature is written in a cursive, flowing style.

Barbara McBride  
Director, Environmental, Health and Safety  
Calpine Corporation