

**COALITION FOR SUSTAINABLE CEMENT MANUFACTURING & ENVIRONMENT**  
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Comments of the CSCME on Final Draft Guidelines for AB 1613 Qualification  
In Docket No. 08-WHCE-1

The Coalition for Sustainable Cement Manufacturing and Environment (CSCME) has previously provided comments regarding the qualification under AB 1613 of bottoming cycle combined heat and power (CHP) facilities. CSCME represents cement manufacturers who have the ability to produce some electricity using waste heat from cement kilns, even after recycling much of that waste heat for other internal processes. Because the process uses for the waste heat have already been used to the extent possible, unless the waste heat is used to produce electricity, it will be exhausted as waste heat. Production of electricity from waste heat produces no incremental greenhouse gases (GHG) and, as recognized by the final draft guidelines, need meet no efficiency standard or emission standard since it effectively produces electricity with no additional fuel. With the use of a limited amount of supplemental firing, additional electricity can be produced. While CSCME members anticipate using their electrical output on-site in most circumstances, there may be times when power is available to sell to the grid. In addition, CSCME is concerned that the CEC AB 1613 guidelines may be used for other regulatory purposes in the days ahead, and thus, as much as possible, should be reasonable and consistent with the state's interest in promoting efficient CHP.

The issue CSCME addresses in these comments is the proposal to set a stricter efficiency standard for CHP in the proposed guidelines than that specified in the enabling legislation, i.e. 62% vs. 60% electrical efficiency. The statutory requirement of 60% electrical efficiency is already greater than existing gas-fired powerplants. Even with a heat rate of 7000 Btu/kWh, which is roughly state-of-the-art under steady-state operating conditions, the electrical efficiency of a combined cycle powerplant is just under 50%. Thus, the electrical efficiency standard in the statute represents a significant improvement over straight power generation. The 60% standard in the enabling legislation already goes beyond all efficiency requirements to put the CHP system on a par with straight power generation. Thus, any CHP that can produce electricity with a 60% efficiency and meet the Emissions Performance Standard (EPS), should be preferred over new gas-fired generation. To raise the standard to 62% simply reduces the amount of efficient, clean power that can be produced with CHP and will result in more generation coming from less efficient combined cycle facilities.

As far as the cement industry is concerned, increasing the electrical efficiency standard from 60% to 62% will result in less electrical output and more purchases from utilities or other load-serving entities. We fail to see why this is beneficial to the state.

In response to critics who may claim that the power for load-serving entities will come from renewable generation, we point out that gas-fired generation will still be needed, at levels that we hope the CAISO will begin to specify when its draft 33% RPS integration study is available in March. The merits of CHP should be compared to those of other conventional gas-fired generation projects. The 60% electrical efficiency standard is already a desirable alternative to this conventional generation. We see no reason why the Commission should seek to reduce

electrical output from any bottoming cycle CHP facility that uses a limited amount of supplemental firing but still meets the EPS and the statutory electrical efficiency standard. We encourage the Commission to reverse the proposed change to a 62% efficiency standard from bottoming cycle CHP and revert to the 60% standard in AB 1613.