

**STAFF-PROPOSED REGULATIONS FOR
IMPLEMENTING THE
GREENHOUSE GASES EMISSION
PERFORMANCE STANDARD FOR LOCAL
PUBLICLY OWNED ELECTRIC UTILITIES**

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Introduction

This document presents Energy Commission staff's proposed regulations establishing and implementing a greenhouse gases emissions performance standard (EPS) established pursuant to Senate Bill 1368 (codified in Public Utilities Code section 8340 et seq.). Staff has prepared these regulations in response to direction provided by the Energy Commission's Electricity Committee at its December 8, 2006 workshop, in which potential implementation issues and options for developing regulations in accordance with SB 1368 were discussed with interested parties.

SB 1368 requires the California Energy Commission, in consultation with the California Public Utilities Commission (CPUC) and the California Air Resources Board, to establish a greenhouse gases emission performance standard, applicable to local publicly owned electric utilities (POUs), not exceeding the rate of greenhouse gases emitted per megawatt-hour associated with combined-cycle, natural gas turbine baseload generation. The standard must be consistent with that adopted by the CPUC. The Energy Commission is directed to adopt regulations for establishing and enforcing the standard through a rulemaking proceeding by June 30, 2007.

SB 1368 directs the CPUC to adopt its EPS, applicable to load-serving entities (LSEs), by February 1, 2007. On December 13, 2006, Administrative Law Judge Gottstein and CPUC President Peevey issued their Proposed Decision, titled Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard. Energy Commission staff believes that it is best to follow the proposed decision as closely as possible, only deviating where warranted due to administrative differences between the two agencies or differences between LSEs and POUs. As such, Energy Commission staff's proposed regulations deviate from Administrative Law Judge Gottstein and President Peevey's Proposed Decision (PD) in only five main areas:

1. Due to administrative constraints, Energy Commission staff have chosen to focus these regulations on facilities of 10 Megawatts (MW) and larger. Should it be determined that regulations concerning facilities of under 10MW are needed, staff have reserved space for a later rulemaking.
2. Instead of individually listing the various renewable technologies predetermined to be compliant with the EPS, as was done in the CPUC's PD, Energy Commission staff's proposed regulations identify all RPS-eligible facilities as being compliant with the EPS. This provision is proposed in Section 2907.
3. For determining compliance with the EPS, the regulations propose a self-certification approach that requires the POU's own board to attest to compliance. This provision is proposed in Section 2921.
4. Energy Commission staff are also proposing that the POU's be required to notify the public when they are deliberating on a long-term financial commitment, and

make any relevant documents available to interested persons. This provision is proposed in Section 2920.

5. The regulations contain language limiting application of the EPS to Qualifying Facilities (QFs) subject to any must-take provisions under Title 16 United States Code Section 824a-3. This provision is proposed in Section 2909. The PD does not carve out such an exemption, believing that federal preemption is not triggered because any must-take provisions can be satisfied in under five-year contracts, which are not constrained by SB 1368.

Energy Commission staff requests comments, preferably in the format of a brief or similar legal analysis, from the parties on this provision. Specifically, staff would like the parties to address the following:

Do these regulations, absent any specific QF exemption, have the potential to trigger federal preemption? Within the response, include a discussion of whether POU's are covered under Title 16 United States Code Section 824a-3 and, if so, whether the various POU's have ever been, or anticipate being required to purchase from QFs.

If the regulations could potentially trigger federal preemption, comment on whether the ability to execute contracts of less than five-years satisfies all must-take requirements or whether Section 2909, or similar language, is necessary to comply with SB 1368 and avoid potential preemption issues. It would also be helpful if the parties addressed the argument made in the PUC proceeding that Title 16 United States Code Section 824a-3 requires QFs to comply with state environmental laws and, therefore, no exemption for preemption purposes is needed.

In addition to comments on the listed provisions, Energy Commission staff welcomes any comments concerning other areas where the regulations should deviate from the PD.

This draft represents staff's first attempt at forming regulations pursuant to SB 1368 and does not in any way represent the Electricity Committee's final determination. This staff draft is being offered solely for discussion and comment to facilitate discussion at upcoming Energy Commission workshops.

As indicated on the public notice for the January 11, 2007 workshop, staff would appreciate written comments on these staff proposed regulations by 5:00 p.m. January 9, 2007; however, additional comments will be accepted after the January 11, 2007 workshop. Because there is not much time before these regulations need to be finalized, staff encourages all interested parties to be prepared to offer specific alternative language where changes are suggested. Staff also encourages the parties to identify whether additional provisions not encapsulated here are necessary to facilitate implementation and enforcement of the EPS.

Chapter 11. Greenhouse Gases Emission Performance Standard

Article 1. Provisions Applicable to Electrical Generating Resources 10 MW and Larger

§2900 Scope

This article only applies to Electrical Generating Resources 10MW and larger and long-term financial commitments in such facilities.

§2901 Definitions

- (a) “New ownership investment” means:
- (1) Any capital outlay in new power plant construction;
 - (2) The acquisition of a new or additional ownership interest or lease in an existing power plant previously owned by others;
 - (3) Any units added to a deemed-compliant facility, if such units result in an increase of 50 MW or more to the power plant’s rated capacity; or
 - (4) Any new capital outlay in a POU’s own existing, non-CCGT power plant that:
 - (A) is intended to extend the life of one or more units by five years or more,
 - (B) results in a net increase in the rated capacity of the power plant, or
 - (C) is intended to convert a non-baseload plant to a baseload plant.
- (b) “Covered procurement” means:
- (1) A new ownership investment, or
 - (2) A new contract commitment (including renewal contracts) of five years or greater with:
 - (A) a baseload generation facility, unless the facility is deemed compliant, or
 - (B) any units added to a deemed-compliant facility if the additional units result in an increase of 50 MW or more to the power plant’s rated capacity.
- (c) A “Deemed-compliant facility” means any combined cycle natural gas power plant that was in operation or had an Energy Commission final permit decision to operate by June 30, 2007.
- (d) “Baseload generation” means electricity generation from a power plant that is designed and intended to provide electricity at an annualized, rolling year capacity factor of at least 60 percent.
- (e) “Combined-cycle natural gas” means a power plant that employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.
- (f) “Local publicly owned electric utility” means a “local publicly owned electric utility” as defined in Public Utilities Code section 9604.

- (g) “Long-term financial commitment” means either a new ownership investment in baseload generation or a new or renewed contract with a term of five or more years, which includes procurement of baseload generation.
- (h) “Power plant” means a facility for the generation of electricity, and includes one or more generating units at the same location.
- (i) “Rated capacity” means the power plant’s maximum rated output under specific conditions designated by the manufacturer and usually indicated on the nameplate physically attached to the generator.

§2902 Greenhouse Gases Emission Performance Standard

The greenhouse gases emission performance standard (EPS) applicable to this chapter is 1000 pounds of (0.46 metric tons) carbon dioxide (CO₂) per megawatt hour of electricity.

§2903 EPS Compliance Calculations

Unless otherwise specified, a facility’s compliance with the EPS shall be determined by dividing the facility’s annualized carbon dioxide emissions in pounds by the facility’s annualized net electricity production in MWh.

- (a) A facility’s annualized carbon dioxide emissions shall be calculated by summing the annualized quantity of each fuel used at the facility directly attributable to electricity production, assuming all carbon in the fuels is converted to carbon dioxide. Fuels are those used in the boiler, combustion turbine, reciprocating or other engine, or fuel cell, including primary and secondary fuels, backup fuels, and pilot fuels. Fuels used in ancillary equipment (e.g., fire pumps, emergency generators, vehicles) are not to be included.
- (b) A facility’s annualized electricity production in MWh shall be the net electricity available for use at a commercial or industrial process onsite or at a host site, or sale or transmission from the facility.

§2904 Cogeneration Facilities

A cogeneration facility’s compliance with the EPS shall be determined by dividing the facility’s annualized carbon dioxide emissions by the facility’s annualized equivalent net electricity production. Cogeneration is the combined production of useful heat and electricity, or combined heat and power.

- (a) A cogeneration facility’s annualized carbon dioxide emissions shall be calculated by summing the annualized quantity of each fuel used on site at the facility directly attributable to electricity production and industrial or commercial process, assuming all carbon in the fuels is converted to carbon dioxide. Fuels are those

used in the boiler, combustion turbine, reciprocating or other engine, or fuel cell, including primary and secondary fuels, backup fuels, and pilot fuels. Fuels used in ancillary equipment (e.g., fire pumps, emergency generators, vehicles) are not to be included.

- (b) A cogeneration facility's annualized equivalent net electricity production in MWh shall be the net electricity available for use at a commercial or industrial process onsite or at a host site, or for sale or transmission from the facility, plus the useful thermal energy, converted to MWh equivalent by dividing the useful thermal energy, in million British Thermal Units (mmBtu) by 3.414 mmBtu/MWh. Useful heat, or thermal energy, output of a topping cycle cogeneration unit is that which is made available to an industrial or commercial process (net of any heat contained in condensate return and/or make up water); used in a heating application (e.g., space heating, domestic hot water heating); or used in a space cooling application (e.g., thermal energy used by an absorption chiller). The useful thermal energy of bottoming cycle cogeneration is that used by an industrial process.

§2905 Biomass, Biogas or Landfill Gas Energy Facilities

- (a) Facilities using biomass, biogas, or landfill gas as fuel(s) are determined to be compliant with the EPS. Biomass fuels are agricultural and wood wastes and digester and landfill gases that would otherwise be disposed of utilizing open burning, forest accumulation, landfill, flaring, spreading, or composting.
- (b) Non RPS-eligible facilities that use biomass, biogas or landfill gas in combination with other fuel(s) shall determine compliance with the EPS by calculating carbon dioxide emissions from the fuels other than other biomass, biogas or landfill gas.

§2906 Facilities that Sequester Carbon Dioxide

If a facility sequesters its carbon dioxide emissions in accordance with a sequestration program, the emissions calculation of that facility, for the purposes of this chapter, shall not include the carbon dioxide emissions successfully sequestered. If a facility provides documentation that a reasonable and technically feasible carbon dioxide injection project will result in a permanent sequestration of CO₂ once the injection project is operational, the facility can determine EPS compliance by presenting projections (and documenting those projections) of net emissions over the life of the power plant.

§2907 Renewable Portfolio Standard-Eligible Facilities

Renewable Portfolio Standard-eligible (RPS-eligible) facilities, as defined in the most recent edition of the Renewables Portfolio Standard Eligibility Guidebook, are determined to be compliant with the EPS.

§2908 Unspecified Power Contracts

A contract of five years or more for unspecified baseload power is not compliant with the EPS.

§2909 Applicability of the Emission Performance Standard to Qualifying Facilities

The emission performance standard shall not apply to any qualifying small power production facility or qualifying cogeneration facility, as defined by 16 U.S.C. §796 (17-18), that is the subject of a must-take provision pursuant to 16 U.S.C §824a-3.

§2920 Public Notification

Each local publicly owned electric utility shall provide public notice any time it deliberates undertaking a long-term financial commitment that is or may be subject to the EPS.

- (a) Upon scheduling a public meeting at which proposed long-term financial commitments are to be considered, the utility shall inform the Energy Commission of the date, time and location of the meeting so that the Commission may make the information available on its website. This requirement may be satisfied by providing the Energy Commission the URL at which this information is to be made available.
- (b) Upon producing documents to be provided the public for discussion of or comment on a proposed investment, the utility shall provide the Energy Commission with an electronic copy of each document for posting on the Commission website. This requirement may be satisfied by providing the Energy Commission the URL at which the documents are available, or by providing details regarding how the documents may otherwise be accessed by the public.

§2921 Annual Compliance Filing

On or before February 15th of each year, each local publicly owned electric utility shall submit a compliance filing to the Energy Commission. The compliance filing shall contain one paper copy, with original signature, and, if feasible, an electronic copy of the following:

(a) An attestation, signed by an authorized agent of the governing board of local publicly owned electric utility under penalty of perjury, that

- (1) the signatory has reviewed, or caused to be reviewed, the compliance submittal, and
- (2) based on the signatory's information, knowledge or belief, the compliance filing does not contain an untrue statement of a material fact or omits to state a material fact necessary to make the statements true.

(b) A listing of all the covered procurements, excluding those that fall under §2905(a) or §2907, entered into by the utility during the previous calendar year, if any. Each entry shall include the following information:

(1) For new or renewed contracts of five years or longer:

- (A) the terms of the contract and options to extend the contract;
- (B) the unit(s) or facility(ies) providing energy under the contract;
- (C) a description of the design or operation of the energy source(s) so as to indicate whether or not they are baseload;
- (D) an explanation as to how the contract is compliant with the EPS;
- (E) supporting documents or information which allow for assessment of compliance with the standard, including but not limited to staff assessments and reports to the utility's governing board, planned or historical production and fuel use data, and continuous emissions monitoring data.

(2) For new ownership investment

- (A) For new construction or purchase of an existing generation unit or facility, a description of the planned powerplant or the purchased asset specifying the power generating equipment, power source (i.e. fuel type, wind, biomass), any supplemental fuel source and any historical production and fuel use data.
- (B) For incremental investment which is defined to be a covered investment per Section 2900(a), a description of the modifications to the unit(s) and their impact on generation capacity, emissions, and planned operation.
- (C) For non-renewable resources, the heat rate or emissions profile of the facility, and the source of this information.

§2922 Compliance Investigation

The Energy Commission may on its own motion, or as a result of a request from a member of the public, staff, or other agency, conduct a complaint or investigation proceeding, or both, pursuant to Chapter 2, Article 4 of these regulations, to determine a POU's compliance with this chapter. In conducting such a proceeding, the Energy Commission may require the production of information and documents beyond those made available to the public during consideration of the investment or submitted with the Annual Compliance Filing, including, but not limited to, contracts, staff assessments and reports to the utility's governing board, land use and air quality permits, continuous emissions monitoring data, and other information and documents which aid in assessing compliance with this chapter.

§2930 Case-by-Case Review for Reliability or Financial Exemptions

A POU may petition the Commission for an exemption from application of this chapter to a particular long-term financial commitment. For such an exemption the POU must demonstrate that:

- (a) the long-term financial commitment to a non-compliant facility is necessary to address system reliability concerns; or
- (b) extraordinary circumstances, catastrophic events, or threat of significant financial harm will arise from implementation of this chapter due to unforeseen circumstances not previously contemplated in the establishment of these regulations.

Article 2. Provisions Applicable to Electrical Generating Resources Under 10 MW

[Reserved]