Final Statement of Reasons for Rulemaking

Including Summary of Comments and Agency Responses

PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE DISTRIBUTED GENERATION CERTIFICATION PROGRAM

Public Hearing Date: October 19, 2006
Agenda Item Number: 06-9-5

State of California
AIR RESOURCES BOARD

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GENERAL

On October 19, 2006, the Air Resources Board (ARB or Board) conducted a public hearing to consider amendments to the distributed generation (DG) certification regulation. The DG certification regulation was required by Senate Bill (SB) 1298 (chapter 741, statutes of 2000). The DG certification regulation establishes emission standards and other certification requirements for electrical generation technologies that are exempt from air pollution control or air quality management district (district) permit requirements. The amendments to the DG certification regulation modify sections 94200-94214 of title 17, California Code of Regulations (CCR). The Staff Report: Initial Statement of Reasons for Proposed Amendments to the Distributed Generation Certification Regulation, released to the public on September 1, 2006 (staff report), is incorporated by reference herein.

At the October 19, 2006, hearing, the Board adopted the amendments as proposed. The Final Statement of Reasons (FSOR) summarizes the written and oral comments received during the 45-day comment period proceeding the October 19, 2006, public hearing and at the hearing itself, and contains the ARB staff's responses to those comments.

Fiscal Impacts

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district, the costs of which are reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

Consideration of Alternatives

The Board has further determined that no alternatives considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board. SB 1298 dictated specific requirements for the DG certification program, which limited the alternatives the ARB staff could consider in developing this regulation.

MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

No substantive changes were made to the original proposal. The Final Regulation reflects some nonsubstantive format changes.

CHANGES WITHOUT REGULATORY EFFECT

No changes were made to the original proposal.

SUMMARY OF COMMENTS AND AGENCY RESPONSES

The Board received written and oral comments in connection with the 45-day comment period and at the October 19, 2006, hearing. A list of commenters is set forth below, identifying the date and form of all comments that were submitted. Following the list is a summary of each objection or recommendation made regarding the proposed action, together with an explanation of how the proposed action has been changed to accommodate the objection or recommendation, or the reasons for making no change.

Responses to Comments Received During the 45-day Public Comment Period and Board Hearing

Abbreviation	Commenter
Capstone	Mark Gilbreth President and CEO Capstone Turbine Corporation Written testimony: October 17, 2006
CMC	Carlo Castaldini CMC-Engineering Written testimony: September 28, 2006
IR	James H. Watts Global Product Manager Ingersoll Rand Written testimony: October 18, 2006
SMUD	Ruth MacDougal Sacramento Municipal Utility District Oral testimony: October 19, 2006
Solar	Leslie Witherspoon Environmental Programs Manager Solar Turbines Incorporated Written testimony: October 17, 2006

Comments and Responses

1) Comment: Change the proposed implementation date for the fossil fuel central power plant best available control technology (BACT) emission levels from January 1, 2007, to November 1, 2007. The feasibility of microturbine technology to meet the 2007 levels has not been demonstrated. (Capstone)

   Response: State law requires distributed generation (DG) technologies to meet central station power plant BACT emission levels by the "earliest practicable date." For the CARB certification program, established pursuant to State law for technologies exempt from local air district permits, the Board established January 1, 2007, as this date when it first adopted the regulation five years ago. Since that time, five fuel cells and one microturbine have been able to certify to these emission levels. Staff has determined that there is no compelling reason to relax the regulation and that the January 1, 2007, date is both feasible and appropriate.

2) Comment: The additional cost required to comply with CARB 2007 standards is not incurred by competing reciprocal engines, which are required to be permitted by local air districts and do not need to meet CARB 2007 standards. Therefore, the CARB 2007 standards have an impact on California business competitiveness. (Capstone)

   Response: In 2000, State law, recognizing that low-emission DG technologies may be more expensive than higher-emitting technologies, directed the California Public Utilities Commission (CPUC) to establish an incentive program for "ultraclean" DG technologies. The Self-Generation Incentive Program (SGIP) recognizes the CARB 2007 standards as being "ultraclean"; therefore, financial incentives to meet the CARB 2007 standards help offset price differentials in the marketplace.

3) Comment: It is unlikely that Capstone will have a 65kW microturbine for sale by January 1, 2007. The resulting loss of potential market will have a negative impact on sales in California. If the implementation date is extended, it provides Capstone the opportunity to incorporate the required design changes in a more cost effective way. (Capstone)

   Response: See 1) above.

4) Capstone agrees with the alignment of the Self-Generation Incentive Program with the CARB 2007 standards; however, the SGIP standards are NOx only, which our current C65 microturbine meets. Therefore, there is no need to accelerate adoption of CARB 2007 emissions requirements for CO and VOCs to be in concert with the SGIP. (Capstone)

Response: Staff did not accelerate emissions requirements for CO and VOCs to be in concert with the SGIP. The CARB 2007 standards preceded the SGIP and are part of the central station power plant BACT emission levels.

5) Comment: Premature adoption may actually increase NOx, CO, VOC, and greenhouse gas emissions if Capstone is unable to participate in California to the extent it has previously. Projects will have to rely on traditional electrical power from the utility grid and heat from boilers or hot water heaters. (Capstone)

Response: See 1) above.

6) Comment: The qualifying efficiency requirement for combined heat and power (CHP) credit is a misstep. (Solar)

Response: Staff addressed this issue in the 2001 FSOR, when the Board originally adopted the regulation. The amended regulation does not alter the minimum energy efficiency requirement for CHP credit. In order to be credited for CHP, manufacturers must provide consumers with a system that captures a significant portion of the energy from the exhaust waste heat. This requirement ensures that the CHP systems will be able to provide a useful energy stream to the consumers.

7) Comment: The Distributed Generation Guidelines should be made consistent with the Distributed Generation Certification Regulation. (SMUD, Solar)

Response: State law required ARB to issue guidelines to the local air districts for permitting new DG equipment. The Board approved these DG guidelines for permitting in 2001. ARB staff did not bring the guidelines to the Board for revision during this rulemaking process.

At the time of adoption, the guidelines represented BACT for internal combustion engines and turbines. Local air districts could use the guidelines at their discretion to amend their BACT requirements and/or rules. The DG guidelines and DG certification regulation do not have to be similar, as they address different equipment.

To date, staff is unaware that the permitting guidelines issued to the local air districts in 2001 have created any permitting issues.

8) Comment: It is not clear that the 2008 waste-gas standards can be met by microturbines with oil-field waste gas as the fuel. (IR)

Response: ARB staff requested that manufacturers, local air districts, and end-users submit emission data for waste-gas fueled DG devices. ARB staff

received one source test for a microturbine fueled by oil-field waste gas. That unit's emission levels were 60 to 97 percent less than the 2008 waste-gas emission standards. Based on this, staff concluded that microturbines can meet the 2008 waste-gas emission standards using oil-field waste gas as the fuel.

9) Comment: A technology review should be added to the regulation to evaluate the 2013 waste-gas emission standards prior to their effective date of January 1, 2013. (IR)

Response: While the regulation does not contain a provision for a technology review, ARB staff will monitor the emission levels of waste-gas fueled technologies and work with manufacturers to evaluate the need to amend the waste-gas emission standards prior to the effective date of January 1, 2013.

10) Comment: Please clarify whether a certified microturbine, coupled with an in-line steam generator in such a way that the exhaust streams are commingled, would be subject to the DG certification program. (CMC)

Response: The DG certification program applies to electrical generation technologies that local air districts choose to not permit. Therefore, when considering such a system as was described in the comment, a proponent must check with the local air district to determine if the district will permit the entire system or only the steam generator. If the air district chooses not to permit the microturbine coupled with the steam generator as a total system, then the microturbine would be subject to the requirements of the DG certification regulation. Technologies that have been certified for use in California are listed on ARB's website at http://www.arb.ca.gov/energy/dg/dg.htm.