Mitchell, Bruce

From:

Byron Burrows [btburrows@tecoenergy.com]

Sent:

Thursday, August 21, 2008 1:29 PM

To:

Mitchell, Bruce

Cc:

Tom Davis; David Lukcic; Laurie Pence

Subject:

TEC BPS Peaker Application

Attachments: Bayside PSD pg41.pdf; 40 CFR 60 Subpart KKKK.pdf; TEC CD 1st Amend 091001.pdf;

Bayside Peakers - NSPS Subpart IIII

Bruce:

Attached is the following information you requested:

- 1. Emergency Generator 40 CFR 89 regs (as well as sub-referenced 40 CFR Part 80) with applicable parts documenting how we arrived at the proposed limits stated in the application (see Tom's email attached).
- 2. Corrected pg 4-1 showing the requested 3500 operating hours.
- 3. Complete copy of the 1st Amendment to the Consent Decree describing the addition of Condition 86.1, which was the basis for the netting procedure (see pps 4-5).
- 4. 40 CFR 60 KKKK regulation with applicable parts highlighted. Let me know if you'd like a MS Word version with the non-applicable parts deleted.
- 5. 40 CFR Subpart IIII with applicable parts highlighted (see Tom's email attached).

Thank you for your prompt attention to our application. Let us know if you'd like this information presented in a different way.

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AUG 21 2008

4.0 STATE AND FEDERAL EMISSION STANDARDS

BUREAU OF AIR REGULATION

4.1 NEW SOURCE PERFORMANCE STANDARDS (NSPS)

Section 111 of the CAA, Standards of Performance of New Stationary Sources, requires EPA establish federal emission standards for source categories that cause or contribute significantly to air pollution. These standards are intended to promote use of the best air pollution control technologies, taking into account the cost of such technology and any other non-air quality, health, and environmental impact and energy requirements. These standards apply to sources that have been constructed or modified since the proposal of the standard. Since December 23, 1971, EPA has promulgated more than 75 standards. The NSPS are codified in the Code of Federal Regulations at 40 CFR 60.

The BPS SCCT project will include eight SCCTs and two emergency generator diesel engines. These SCCTs and diesel engines will be subject to the applicable requirements of NSPS Subparts KKKK and IIII, respectively, as discussed in the following sections.

NSPS SUBPART KKKK—STATIONARY COMBUSTION TURBINES

Subpart KKKK establishes emission limits for CT/HRSG units that commenced construction after February 18, 2005, and that have a heat input at peak load equal to greater than 10.7 gigajoules (10 million British thermal units per hour [MMBtu/hr]) based on the higher heating value (HHV) of the fuel.

The BPS SCCTs will be fired exclusively with natural gas for up to 3,500 hr/yr. NSPS Subpart KKKK specifies emission limitations, monitoring, reporting, and recordkeeping requirements for NO_x and SO₂. Applicable NSPS Subpart KKKK emission standards for the SCCTs units are summarized as follows:

- \underline{NO}_x —25 ppmvd at 15 percent O_2 , or 1.2 pounds per megawatt hour (lb/MWh) gross energy output.
- SO₂—0.90 lb/MWh gross energy output, or 0.060 lb/MMBtu.

The BPS SCCTs will comply with the applicable requirements of NSPS Subpart KKKK.