

CALPINE

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July 2, 2007

Mr. Jeff Koerner, P.E. Professional Engineer Administrator Florida Department of Environmental Protection Division of Air Resource Management 111 South Magnolia Drive, Suite 23 Tallahassee, Florida 32301

Re: **Auburndale Energy Complex**

Osprey Energy Center

Title V Air Operation FINAL Permit No.: 0150221-009-AV

PSD Permit Number: PSD-FL-287

Request for Permit Revision, EU-007 and EU-009 Heat Input

Representation | 105022 | 05022 | 05022 | 013-AV

Dear Mr. Koerner:

Calpine Construction Finance Company, L.P. owns Osprey Energy Center (OEC) located at the Auburndale Energy Complex in Auburndale, Polk County, Florida. OEC consists of two combined cycle combustion turbine systems with each combined cycle system consisting of one 170 MW Siemens Westinghouse "F" Class (501FD) combustion turbine (CT), one heat recovery steam generator (HRSG), and one shared 200 MW steam turbine-generator. The CTs are designated as EU007 and EU009 at the Auburndale Energy Complex.

The Florida Department of Environmental Protection (FDEP) issued Air Construction Permit No. PSD-FL-287 on March 1, 2001 authorizing construction and initial operation of EU007 and EU009 (referred to in the Air Construction Permit as CT-1 and CT-2 at the OEC). Title V Air Operation Permit (FINAL Permit No.: 0150221-009-AV) was last revised on December 13, 2006, authorizing continuing operation of the Auburndale Energy Complex with the OEC emission units. The purpose of this letter is to request a concurrent revision to these two permits to allow for an increase in permitted capacity for the two units EU007 and EU009.

Please note, the Title V Renewal Application is currently being processed at this time. Minor language changes have been requested as part of the Title V Renewal. Numbers presented in this modification have been represented in the renewal application.

Section III, Condition D.1. of FINAL Permit No.: 1050221-009-AV limits the turbine heat input to 1,669 million British thermal units per hour on a lower heating value basis (mmBtu/hr, LHV) at a compressor inlet temperature of 59°F when firing natural gas without power augmentation. The corresponding heat input limitations are contained in Specific Condition No. 9 of Air Construction Permit No. PSD-FL-287. Operational data for OEC indicates that these maximum heat inputs, which were based on gas turbine vendor projections, underestimate the actual performance of the gas turbines by approximately 12 percent.

Accordingly, CCFC requests revisions to FINAL Permit No.: 1050221-009-AV, Condition D.1 and Air Construction Permit No. PSD-FL-287, Specific Condition No. 9 to allow a maximum heat inputs of 1875 mmBtu/hr, LHV at a compressor inlet temperature of 59°F when firing natural gas without power augmentation. OEC does not request any other revisions to FINAL Permit No.: 1050221-009-AV or Air Construction Permit No. PSD-FL-287. Units EU007 and EU009 will continue to comply with all of the current emission limitations and standards specified by FINAL Permit No.: 0150221-009-AV.

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In support of this Title V permit revision request, a completed Application for Air Permit - Long Form (Facility Information section only, including Application Responsible Official and Professional Engineer certifications) is enclosed.

Please feel free to contact me (by telephone at (713) 570-4795 or by email at <u>jgoodwin@calpine.com</u>) or Heidi Whidden (by telephone at (713) 570-4829 or by email at <u>hwhidden@calpine.com</u>) if you have any questions regarding this permit revision request.

Sincerely,

Jason M. Goodwin, P.E.

Director - Environmental, Health & Safety

Eastern Power Region