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March 17, 2005

Mr. James K. Pennington, P.E.
Florida Department of Environmental Protection
Division of Air Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Osprey Energy Center
PSD-FL-185, Construction Permit 1050221-004-AC and PSD-FL-287
Request for PSD Modification to Assist in Compliance with the Revised Part
60 Subpart GG Regulations and Provide Appropriate Permit Clarification

Following conversations between Heidi Whidden of Calpine and Robert Bull of the Department regarding the Draft Title V permit covering three Calpine facilities collectively known as the Auburndale Energy Complex (the Complex), the owners of the Complex, consisting of the Osprey Energy Center (OEC), Auburndale Power Plant (APP), and Auburndale Peaker Energy Center (APEC) and collectively represented by Calpine Corporation (Calpine), are requesting modifications to their corresponding PSD Permits to conform with the revised 40 CFR Part 75 Subpart GG regulations and provide appropriate clarifications to ensure consistency among the three PSD permits and with the collective Title V permit. This modification will ensure conformance with the revised regulations and allow the Complex to comply with standard reporting requirements throughout the three facilities.

In keeping with prior correspondence, Calpine requests a change in follow PSD Permit Conditions:

APP-PSD-FL-185

1. *Throughout*-Throughout the permit, the agency is referred to the DER. Due to the departmental change, the agency may choose to update these references to DEP.
2. *Throughout*-Throughout the PSD, F.A.C. Rule 17 is referenced. Due to the rule reorganization, the agency may choose to update to the appropriate Chapter 62 regulations.
3. *Page 3 of 10, General Condition 8*-This condition requires the facility to immediately provide the department with detailed information in the event of a non-compliance event. The Title V Permit (A.39.) requires immediate notification per Rule 62-4.130, F.A.C. and a written report submitted with the quarterly report if requested by the Department. The APEC Construction Permit

(*Page 5 of 13, Condition 7*) and OEC PSD Permit (*Page 7 of 13, Condition 12*) specifically states notification should occur as soon as possible, but at least within one working day, excluding weekends and holidays. To assist in standard reporting procedures for the site, Calpine requests the conditions in all three permits be replaced with the following language:

"If temporarily not able to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind, or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problems; steps being taken to correct the problem and prevent future reoccurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. A written report shall be provided in the quarterly report, as requested by the department."

4. *New Condition*-On February 6, 2002 a new condition authorized the installation of a wet compression system through a letter modification (1050221-005-AC). Calpine requests this letter modification be directly incorporated into the modified PSD Permit through the addition of a condition that reads as follows:

"Wet Compression System

A wet compression system may be installed on Unit 1. Operation of the wet compression system is approved for use on Unit 1 during any periods at which the ambient temperature is above 60 degrees F. Use of the wet compression system is limited to periods during the firing of natural gas only."

5. *Page 6 of 10, Condition 8*-This condition requires Sulfuric Acid and Volatile Organic Compounds to be tested annually. However, the current Title V does not require these tests to be completed. Calpine requests these requirements be removed.
6. *Page 6 of 10, Condition 8*-This condition requires testing be completed while operating 95-100% of the maximum heat rate input. However, the current Title V requires testing be completed between 90-100% of the maximum heat rate input (Condition A.29). Calpine requests the PSD be updated to meet the Title V requirements.
7. *Page 6 of 10, Condition 8*-This condition requires Nitrogen Oxides to be tested via Method 20. However, Subpart GG has been modified to allow Acid Rain CEMS to follow the quality assurance methods of Part 75. Part 75 requires the use of Method 7E for completion of NOx RATAs. Calpine requests both Method 20 and 7E be listed in the permit.

8. *Page 7 of 10, Condition 14*-This condition requires at least 30-days notification prior to compliance testing. However, the current Title V requires 15-days notice (A.33). Calpine requests this requirement be updated to read:

"An initial compliance test notification shall be provided at least 30-days prior to testing. An annual test notification shall be provided at least 15-days prior to testing."

9. *Page 8 of 10, Condition 16*-This condition requires the continuous emission monitor to comply with 40 CFR 60, Appendix B, PS 2. In July 2004 the EPA revised 40 CFR Part 60 Subpart GG to more closely match the requirements of 40 CFR Part 75, the rule revision allows continuous monitors regulated by Part 75 to adhere to the Part 75 quality assurance procedures in place of Appendix B. Calpine requests the above-mentioned language be changed to:

"The continuous emissions monitor must comply with the quality assurance requirements of 40 CFR Part 75."

10. *Page 8 of 10, Condition 17*-This condition requires the continuous monitoring of the steam to fuel injection ratio. The revisions to Subpart GG allow facilities to use a CEMS in lieu of monitoring the steam to fuel ratio. Calpine suggests removing this requirement, and relying on the requirements of Condition 16 for compliance.

11. *Page 8 of 10, Condition 18*-This condition requires the sulfur content, nitrogen content and the lower heating value of the fuel being fired be based on a 12-month rolling average from the fuel delivery receipts. Per EPA guidance for custom fuel monitoring plans and the Subpart GG modification, the owner may: (1) Cease to monitor nitrogen content of the fuel if a NO_x CEMS is installed; (2) Monitor the natural gas sulfur content following the sampling requirements of section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 (At least one sample shall be collected annually.); and (3) Review and retain a fuel oil sulfur analysis for each delivery of fuel oil. No review of the lower heating value is required in Part 60. Calpine requests this language be changed to:

"Monitoring of fuel shall be consistent with the requirements of 40 CFR Part 60 Subpart GG."

12. *Page 9 of 10, Condition 24*-This condition requires the use of the 1991 version of the quarterly excess emission reports of 40 CFR 60.7 and 60.334. Calpine requests the 1991 specification be removed from this requirement.

13. *Page 9 of 10, Condition 27*-This condition requires the annual submittal of an Annual Operating Report. This condition also includes the data that shall be included in the report. Since this permit was issued, the language specifying these requirements has changed. The APEC and OEC permits have appropriate examples. Calpine requests this language be changed to:

"Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rats and emissions from this facility. Annual operating reports shall be sent to the DEP's Southwest District Office by March 1st of each year."

APEC-Construction Permit 1050221-004-AC

1. *Pages 1 and 2 of 13*-The nominal load of the Peaker (EU-006) is listed as 104 MW. However, this was a typographical error made during the issuance of the PSD Permit and was never corrected. Calpine requests this value be updated to 120 MW. Calpine believes that this does not represent a change in the permit due to this change not increasing the permitted capacity listed in condition *Page 4 of 13, Condition 3*.
2. *Page 5 of 13, Condition 6*-On April 29, 2002 this condition was modified to authorize the installation of a wet compression system through a letter modification. Calpine requests this letter modification be directly incorporated into the modified PSD Permit.
3. *Page 6 of 13, Condition 14*-The equivalent annual NO_x limit of 9ppmvd corrected to 15% O₂ should be based on a 12-month rolling average (not total) and natural gas firing. See Item #9 regarding the APEC permit, below, concerning *Page 10 of 13, Condition 31 Paragraph 4* for additional discussion.
4. *Page 7 of 13, Condition 14*-The condition states the permittee shall demonstrate compliance through performance tests and emissions monitoring in accordance with Method 20. As discussed, Method 7E is also acceptable. Calpine requests Method 7E be added to the condition.
5. *Page 7 of 13, Condition 18 (b)*-This condition requests a verbal report within one day of a malfunction followed by a full written report with the quarterly excess emissions report. The OEC permit states that this report should only be provided upon request. Calpine believe this is the current understanding of the agency and requests, this language be undated to read, "...submitted in a quarterly report, upon request".
6. *Page 8 of 13, Condition 18 (c)*-Calpine's original understanding was that start-up, shut-down, and Part 75 missing data emissions were not to be included in the NO_x TPY calculation. The Permit currently states that the calculation should

exclude missing data. However, the permit goes on to say that the total must match the data submitted to the Acid Rain Web Site. Data submitted to the Acid Rain Web Site includes start-up, shut-down, and Part 75 missing data emissions. These two statements are contradictory. In addition, Subpart GG specifies that Part 75 monitoring procedures are acceptable, with the exception of missing data. Missing Data is to be excluded from the data averages and reported as monitor down time. Calpine requests this language be deleted.

7. *Page 10 of 13, Condition 31 Paragraph 2*-The continuous compliance averaging language for the CEMS has been accurately reflected in the OEC PSD Permit (*Page 10 of 13, Condition 30*). Calpine requests this language be inserted into this condition. In addition to the OEC language, Calpine requests the additional OEC and APEC clarifications that missing data or out-of control periods are not to be included in the data averages and are to be included on the Excess Emissions Report as Monitoring System Downtime. Calpine requests that this paragraph be revised to read as follows:

“Continuous compliance with the CO and NO_x emissions limits shall be demonstrated by the CEM system on the a 24 hour average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each period and a new average emissions rate is calculated from the arithmetic average of all valid hourly emission rates from the previous period. Valid hourly emission rates shall not include periods of start up or shutdown unless prohibited by 62-210.700 F.A.C. A valid hourly emission rate shall be calculated for each hour in which at least two measurements are obtained at least 15 minutes apart. Excess emissions periods shall be reported as required.”

8. *Page 10 of 13, Condition 31 Paragraph 3*-This paragraph provides the calculation methodology to determine the annual tons of NO_x for EU-001 and EU-006. This calculation does not provide an accurate value for the tons emitted. Based on the first statement that all measurements shall be in pounds (converted to tons) and be based on a 12-month rolling total starting at the first day of each month, Calpine requests the language be updated to the following (changes are underlined):

“...Each monthly total shall be calculated by adding each valid 24-hour total in pounds for the associated month for all fuels. For this calculation, valid operating hours exclude start-up emissions, shut-down emissions, CEMS downtime, and Emissions Unit down time. This total shall be combined with the emissions from the previous 11-calendar months and shall comprise a ~~valid~~ 12-month rolling total.”

9. *Page 10 of 13, Condition 31 Paragraph 4*- This paragraph provides the calculation methodology to determine an annual emissions equivalent of NO_x for EU001 (APP). This calculation does not provide an accurate value for the annual

equivalent emissions. Based on the equation at the bottom of the page, the following text should be provided (changes are underlined):

“For the 9-ppm annual equivalent emissions limit, which is being placed upon EU001, measurement shall be in ppmvd and be based on a 12-month rolling average. At the end of each day a daily average shall be calculated from the valid operating hours. For this calculation valid operating hours exclude start-up emissions, shut-down emissions, CEMS downtime, Emissions Unit down time, and operating on fuel oil. Monthly averages shall consist of the average of each valid daily average. This monthly average shall be averaged with the previous valid 11 monthly averages and shall comprise a 12-month rolling average. Valid daily and monthly averages shall only consist of days and months in which valid hourly data is available. In order to convert each 12-month rolling average to an equivalent limit....”

10. *Page 11 of 13, Condition 31 Paragraph 1 on this page*-The CO calculation is the same calculation discussed earlier for NOx. As expressed in the permit, this calculation does not arrive at an accurate value for the CO mass emissions. Calpine suggests the same changes be made as suggested for Item #8 (*Page 10 of 13, Condition 31 Paragraph 3*) above. Calpine request that the condition read as follows:

“... Each monthly total shall be calculated by adding each valid 24-hour total in pounds for the associated month for all fuels. For this calculation, valid operating hours exclude start-up emissions, shut-down emissions, CEMS downtime, and Emissions Unit down time. This total shall be combined with the emissions from the previous 11-calendar months and shall comprise a 12-month rolling total.”

OEC-PSD-FL-287

1. *Page 6 of 13, Condition 4 and 5*-As discussed in prior correspondence, the Title V permit will combine the Combustion Turbines and HRSGs into two ARMS emission units: EU001 and EU002. The agency may want to update the PSD to match.
2. *Page 8 of 13, Condition 20*-The last bullet in this condition states missing data shall be handled as required by Title IV. However, Subpart GG specifies that Part 75 monitoring is acceptable with the exception of missing data. Missing Data is to be excluded from the data averages and reported as monitor down time. In addition, Condition 30 specifically states that valid emission rates shall not include periods of start up or shutdown. Calpine's understanding of the emission limit is that start-up, shutdown, and missing data are not to be included in the daily averages. Calpine requests this bullet be deleted.

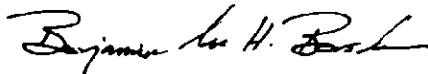
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3. *Page 10 of 13, Condition 29*-Calpine requests the CO language state: "EPA Reference Method 10, "Determination of Carbon Monoxide Emissions for Stationary Sources" or via annual the RATA test".
4. *Page 10 of 13, Condition 32*-This condition requires NOx and CO test results to be the average of three valid one-hour runs. However, if Method 7E is used, the results may include the average of 63-minute runs. Calpine suggests this language be changed to read, "average of three valid test runs each at least one hour long.
5. *Page 11 of 41, Condition 41*-This condition specifies a version of Subpart GG. Calpine requests the department delete this reference.
6. *Page 13 of 13, Condition 46*-This condition provides a calculation to determine ammonia slip. The equation is based on the change in NOx across the catalyst. It is Calpine's understanding this calculation excludes data occurring during start-up and shut-down. Calpine requests this be clarified in the permit.

We look forward to discussing this matter further with you as necessary to expedite this change in the permit. As the Title V permit for these units is also currently under review, and these changes are requested to provide consistency with that permit (Draft Permit Project Number 1050221-009-AV), a copy of this letter is being provided to Mr. Robert Bull at the department. If you have questions or need additional information regarding this request, please contact me by telephone at (813) 637-7305 or via email at bborsch@calpine.com.

Sincerely,

Calpine Construction Finance Company, L.P.
Auburndale Power Partners, LLC
Auburndale Peaker Energy Center, LLC



Benjamin M. H. Borsch, P.E.
Manager, Safety, Health & Environment

CC: Mr. Robert Bull, via email
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