FINAL DETERMINATION

Air Construction Permit
EFS Shady Hills, LLC
Shady Hill Generating Station Expansion Project
DEP File No. 1010373-012-AC (PSD-FL-402A)

PERMITTEE

EFS Shady Hills, LLC
14240 Merchant Energy Way
Spring Hill, Florida 06927

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Office of Permitting and Compliance (OPC)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

DEP File No. 1010373-012-AC (PSD-FL-402A)
Shady Hills Generating Station
Pasco County

EFS Shady Hills, LLC is the parent company of the Shady Hills Power Company, LLC, which operates the existing Shady Hills Generating Station. The facility is located in Pasco County at 14240 Merchant Energy Way, Spring Hill, Florida.

The permittee proposes to construct two 223 megawatts (MW) General Electric Model 7FA.05 combustion turbine-electrical generator sets instead of the two 170 MW General Electric Model 7FA.03 units originally authorized by permit No. 1010373-007-AC (PSD-FL-402) issued on January 12, 2009. The modification includes a 2.8-million gallons distillate fuel oil storage tank.

The project required a review under the Department Rule 62-212.400, Florida Administrative Code (F.A.C.), Prevention of Significant Deterioration (PSD), and Best Available Control Technology (BACT) determinations (or revalidation of previous determinations) for nitrogen oxides (NO_X), carbon monoxide (CO); particulate matter (PM), PM with a mean diameter of 10 microns or less (PM_{10}), and PM with a mean diameter of 2.5 microns or less ($PM_{2.5}$).

NOTICES AND PUBLICATION

On February 7, 2012, the Permitting Authority gave notice of its intent to issue an air permit to the applicant for the described project. The applicant published the Public Notice of Intent to Issue Air Permit for this project on February 15 in the Tampa Bay Times, Pasco Edition.

The complete project file including the Application, Draft Permit, Technical Evaluation and Preliminary Determination (TEPD), key correspondence and comments regarding the draft permit are available at the following web link:

www.dep.state.fl.us/air/emission/construction/shady_hills.htm

COMMENTS ON THE DRAFT PERMIT

On February 20 the applicant submitted a request for extension of time to file a petition for an administrative hearing. The request was granted on February 22 effective until April 5, 2012. The request was filed "simply as a protective measure to avoid waiver of Shady Hills' right to challenge certain conditions" contained in the draft permit package. On March 1 the applicant submitted comments pursuant to the 30-days comment period regarding the draft permit. No comments were received from the public, EPA or other agencies on the draft permit during the 30 day comment period that ended on March 16, 2012.

On March 5, Department technical staff met by teleconference with the applicant's representatives to review the applicant's comments. A discussion version of the final permit and an evaluation of the comments were provided to the applicant on March 16. By electronic mail dated March 21, the applicant advised that they would let the approved extension expire. This allows the Department to take final action on this application after the extension expiration date of April 5.

Shady Hills' comments are paraphrased (except where indicated by quotation marks) below and referenced by draft permit condition. The Department's response follows each comment.

1. Front page of permit: Identify EFS Shady Hills LLC (parent company of the Shady Hills Power Company, LLC) as the permittee.

   Department response: Correction of permittee name will be made.

2. Front page and project description: Add back the term "nominal" (as in the original permit) when describing the size of the combustion turbine-electrical generators (CTG).

   Department response: The CTG will be described as nominal 223 megawatts CTG. Previous permit described nominal 170 MW CTG.

3. Section 3, Condition 6: Shady Hills requests that the reference to BACT in Condition 6 be deleted because PSD was not required for sulfur dioxide (SO_2).

   Department response: The Department will clarify that the natural gas fuel specification of 2 grains sulfur per 100 standard cubic feet (gr/100 SCF) and the fuel oil specification of 0.0015 percent (%) sulfur represent BACT for $PM/PM_{10}/PM_{2.5}$ and not SO_2.

4. Section 3, Condition 10 – Emission Standards: Correct the alphabetical notes in the emission standard table that refer back to the $PM/PM_{10}/PM_{2.5}$ standards.

   Department response: The Department will correct the references in the table.

5. Section 3, Condition 14: Shady Hills requests that the following sentence be deleted:

   "The permittee shall provide the Compliance Authority with any other initial emissions performance tests conducted to satisfy vendor guarantees including CO and particulate tests."

   The applicant states:

   "There is no requirement to conduct particulate testing - initial CO testing is already required under Condition 10. The vendor testing is also done at conditions necessary to satisfy certain contractual obligations that are confidential business information, and may not be in conformance with the test methods specified in conditions 10, 12 and 13."

   Department response: The Department agrees with the applicant and will remove the requirement to help resolve the matter of the extension request. Sufficient data will be obtained during the initial CO performance test and the subsequent temporary CO continuous emission monitoring system (CEMS) to conduct the final BACT determination as described in Section 3, Conditions 34 and 35 without the vendor tests.

6. Section 3, Conditions 21 and 25: Correct references to previous conditions e.g. 20 instead of 200 and 21 instead of 211.

   Department response: The Department will correct the errors that were apparently caused when converting a "WORD" document to a "pdf" document.

7. Section 3, Condition 34 - Final BACT Determination for CO: Regarding the requirement to install a temporary CO-CEMS provide all data to the Department, the applicant recommends adding the following clarifying language:

   "This demonstration data is not to be used for compliance purposes and will not be subject to excess emission reporting requirements."
   Department response: The Department requires ultimate submittal of all data because they will be considered in determining a final BACT determination that may define low load, startup, shutdown and malfunction excess emissions. The CO-CEMS data, including data that might be considered excess emissions by the applicant, do not have to be submitted until the due date of the technical report described in Condition 35.

   The Department Compliance Authority (Southwest District Office) reviewed the condition as drafted and did not interpret the language to mean that the temporary CO-CEMS data are subject to use in determining compliance with the initial CO BACT emission standard. The initial CO BACT standard is clearly based on an initial near-full load compliance test. It is not necessary for the Department to impose a requirement on itself in a permit condition to make that condition clearer. The applicant may determine (and was expected to determine) not to use the temporary CO-CEMS for the purpose of compliance. The Department agrees that the demonstration data will not be subject to the excess emission reporting requirements.

8. Section 3, Condition 3 - Natural Gas Heater: The applicant requests that the natural gas heater be allowed to operate 3,390 hours/year per CTG. The gas heater may (theoretically) operate up to 6,780 hr/yr if each CTG operates up to capacity but never at the same time.

   Department response: The applicant requested this change and provided the rationale when it updated its application submitted in December 2011 to include a CO PSD review and BACT proposal. The applicant also pointed out the error in a review of a preliminary version of the draft permit. The Department intended to make the change earlier and will do so in the final permit. There are no ambient air quality impacts due to the change and there would be only minimal effects on emissions from this small 10 million MMBtu/hour source) firing inherently clean natural gas.

9. Facility and Project Description and Section 3, Subsection D. – Distillate Fuel Oil Storage Tank: Add back the term "nominal" (as in the original permit) when describing the size of the distillate storage tank.

   Department response: The tank will be described as a "nominal" 2.8 Ultralow Sulfur Distillate fuel oil storage tank.

CONCLUSION

The final action of the Department is to issue the final permit with the changes and corrections described above.