Florida Department of **Environmental Protection**

TO:

Joseph Kahn

THRU:

Trina Vielhauer Jeff Koerner

FROM:

Jonathan Holtom \mathcal{F} . \mathcal{V}

DATE:

January 22, 2007

SUBJECT:

Project No. 0730003-010-AC / PSD-FL-343A

Final Construction Permit for City of Tallahassee Electric Utilities

Clarification of Excess Emissions Limitations.

Attached for your approval and signature is a Final construction permit for the City of Tallahassee Electric Utilities' Arvah B. Hopkins Electric Generating Station. This permit revises Condition 20 of Permit No. PSD-FL-343 to better define the allowable periods of excess emissions.

The Public Notice requirements were met on January 7 by publishing in the Tallahassee Democrat. No comments have been received from the public or the applicant in response to this Public Notice, and no petitions were filed for an Administrative Hearing.

I recommend your approval and signature.

Attachments

TLV/jk/jh

FINAL DETERMINATION

City of Tallahassee Electric Utilities Arvah B. Hopkins Electric Generating Station DEP File No. 0730003-010-AC / PSD-FL-343A

The Department distributed a public notice package on December 7, 2006, to revise Condition 20 of Permit No. PSD-FL-343 as described in the "Technical Evaluation and Preliminary Determination", for the Arvah B. Hopkins Electric Generating Station, which is located at 1125 Geddie Road in Tallahassee, Leon County, Florida. The Public Notice of Intent to Issue was published in the <u>Tallahassee Democrat</u> on January 7, 2007.

COMMENTS/CHANGES

No comments were received, either from the public or the applicant, during the 14 (fourteen)-day public comment period.

CONCLUSION

The final action of the Department is to issue the final permit with no changes from the Noticed Draft Permit.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

NOTICE OF FINAL PERMIT MODIFICATION

In the Matter of an Application for Permit by:

City of Tallahassee Electric Utilities Arvah B. Hopkins Electric Generating Station 2602 Jackson Bluff Road Tallahassee, Florida 32304 Permit No. PSD-FL-343A Project No. No. 0730003-010-AC

Facility ID No. 0730003

SIC No. 4911

Authorized Representative:

Robert E. McGarrah, Manager of Power Production

On September 11, 2006, the City of Tallahassee submitted an application to revise Condition 20 of Permit No. 0730003-005-AC (PSD-FL-343). The original permit authorized construction of new combustion turbines HC3 and HC4 at the Arvah B. Hopkins Electric Generating Station, which is located at 1125 Geddie Road in Tallahassee, Leon County, Florida. With regard to these combustion turbines, the application requests the following changes: exclusion of elevated NO_X emissions from the BACT compliance demonstration due to startup (up to the first 45 minutes), shutdown (up to 15 minutes), and fuel switching (up to 15 minutes); exclusion of all elevated NO_X emissions data collected during periods when it is necessary to tune the dry low-NO_X combustion, water injection, and/or selective catalytic reduction (SCR) systems; and clarification that up to 120 minutes in any 24-hour period may be excluded due to malfunctions.

On December 7, 2006, the Department issued an "Intent to Issue Draft Permit" package that revised Condition 20 of Permit No. PSD-FL-343 as described in the "Technical Evaluation and Preliminary Determination" accompanying the package. The Public Notice was published in the <u>Tallahassee Democrat</u> on January 7, 2007. As described in the attached "Final Determination", no comments were received in response to the Public Notice. Enclosed is the Final Permit Modification, which modifies the original air construction permit. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Joseph Kahn, Director

Division of Air Resource Management

FINAL PERMIT MODIFICATION

CERTIFICATE OF SERVICE

Mr. Robert McGarrah, City of Tallahassee (McGarraR@talgov.com)

Mr. John Powell, City of Tallahassee (powelli@talgov.com)

Mr. Rick Bradburn, NWD Office (rick.bradburn@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

FINAL PERMIT MODIFICATION

Original Permit No. PSD-FL-343, Project No. 073000005-AC

The following emissions units are addressed in this permit revision:

ID No.	Common Emission Unit Description
031	Unit HC3 - General Electric LM 6000 Sprint Combustion Turbine capable of inlet chilling to 48°F
032	Unit HC4 - General Electric LM 6000 Sprint Combustion Turbine capable of inlet chilling to 48°F
033 <u>034</u>	750 KW Emergency Diesel Generator, unregulated

All construction related to this project is complete and no further construction is authorized by this action. The following permit conditions are revised as follows. All other conditions are unchanged and the affected emissions units remain subject to the applicable requirements. Deletions are indicated by "strikethrough" and additions are indicated by "double underline".

Combustion Turbines (EU-031 and EU-032)

Specific Condition No. 20 of Permit No. PSD-FL-343 (Project No. 0730003-005-AC) is changed as follows:

- 20. Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:
 - (a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for more than 2 hours 120 minutes in any 24-hour period. [Design; Rule 62-210.700(1) and (5), F.A.C.]
 - (b) During all startups, shutdowns, and malfunctions, tThe continuous emissions monitoring system (CEMS) shall monitor and record emissions during all periods of operation including startups, shutdowns, fuel switches, tuning sessions, and malfunctions. However, up to 2 hours of monitoring data during any 24 hour period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions. A documented malfunction means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile, or electronic mail. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department: [Design; Rules 62-210.700(1), (5), and 62-4.130, F.A.C.]
 - (c) Up to 45 minutes of NO_X CEMS data may be excluded due to a startup when demonstrating compliance with the NO_X BACT emissions standard.
 - (d) <u>Up to 15 minutes of NO_X CEMS data may be excluded due to a shutdown when demonstrating compliance with the NO_X BACT emissions standard.</u>
 - (e) Up to 15 minutes of NO_X CEMS data may be excluded due to a fuel switch when demonstrating compliance with the NO_X BACT emissions standard.
 - (f) To maintain efficient operation, it is necessary to periodically tune the dry low-NOx combustion, water injection, and/or selective catalytic reduction (SCR) systems. Provided the tuning sessions are performed according to manufacturer or industry specifications, NO_X CEMS data may be excluded due to such tuning sessions. A tuning session would occur after equipment replacement, repair, or as required to maintain proper operation of the combustor, water injection or SCR systems. At least one day prior to performing a tuning session, the permittee shall notify the Compliance Authority with details of the activity and the proposed schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.

FINAL PERMIT MODIFICATION

(g) Up to 120 minutes of NO_x CEMS data during any 24-hour period may be excluded due to documented malfunctions when demonstrating compliance with the NO_x BACT emissions standard. A documented malfunction means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile, or electronic mail. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

As limited above, only those periods of data directly attributable to startup, shutdown, malfunction, fuel switching, or tuning shall be excluded from any compliance demonstration. No monitoring data shall be excluded when demonstrating compliance with the NSPS Subpart GG emissions standards. All valid data shall be used to report annual emissions. [Design; Rule 62-210.700(1) and (5), F.A.C.]

750 KW Emergency Diesel Generator, Unregulated (EU-034)

To match with the Department's Air Resource Management System database, the emissions unit identification number for the unregulated 750 KW emergency diesel generator is revised from EU-033 to EU-034. Accordingly, the emissions unit identification is revised as follows:

ID No.	Common Emission Unit Description
031	Unit HC3 - General Electric LM 6000 Sprint Combustion Turbine capable of inlet chilling to 48°F
032	Unit HC4 - General Electric LM 6000 Sprint Combustion Turbine capable of inlet chilling to 48°F
033 <u>034</u>	750 KW Emergency Diesel Generator, unregulated