



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

November 19, 2007

Electronic Mail – Received Receipt Requested.

jim.murray@northernstargen.com

Mr. Jim Murray, Plant Manager
Northern Star Generation Services
Orlando Cogen, LLP
8275 Exchange Drive
Orlando, Florida 32809

Re: Air Construction Permit No. 0950203-007-AC
Orlando Cogen Plant
Combustion Turbine Upgrade Project

Dear Mr. Murray:

On August 21, 2007, the Department received your request for an air construction permit to replace the rotor (power) section and upgrade the Alstom combustion turbine from a Model 11NM to a model GT 11 NMC through replacement of certain components in the compressor section with improved parts.

The enclosed "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a Draft Permit. The proposed "Draft Permit" includes the specific conditions that regulate the emissions units covered by the proposed project. The "Written Notice of Intent to Issue Air Permit" provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue Air Permit" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area.

If you have any questions, please contact the Project Engineer, David Read at 850/414-7268.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/aal/dr

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an

Application for Air Permit by:

Northern Star Generation Services on behalf of
Orlando Cogen Limited L.P.
8275 Exchange Drive
Orlando, Florida 32809

Air Permit No. 0950203-007-AC
Facility ID No. 0950203
Orlando Cogen Plant
Combustion Turbine Upgrade
Orange County, Florida

Authorized Representative:

Mr. Jim Murray, Plant Manager

Facility Location: Northern Star Generation Services operates the Orlando Cogen Plant for Orlando Cogen Limited, L.P. The plant is located in at 8275 Exchange Drive, Orlando in Orange County, Florida.

Project: The existing facility consists of a natural gas-fired combined cycle unit. The combined cycle unit includes: combustion turbine-electrical generator (CT); a heat recovery steam generator with a natural gas-fired duct burner system; and a steam turbine-electrical generator.

The permittee has submitted a permit application to replace the rotor (power) section of the CT and to physically upgrade it from an Alstom Model GT 11NM to a Model GT 11NMC by replacement of key components in the compressor section of the CT with improved ones.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station (MS) #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the Draft Permit by visiting the following website: <http://www.dep.state.fl.us/air/eproducts/ards> and entering the permit number indicated above. A copy of the complete project file is also available at the Air Resources Section of the Department's Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. The telephone number is 407/894-7555.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comments received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 921-9533). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final construction permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

Comments: The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of the Public Notice. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the draft permit and require, if applicable, another Public Notice.

Petitions: The Department will issue the construction permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specified rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice, Technical Evaluation, and the Draft permit) and all copies were sent electronically (with Received Receipt) before the close of business on **November 19, 2007** to the persons listed:

Mr. Jim Murray, Northern Star: jim.murray@northernstargen.com

Mr. Dave Kellermeyer, Northern Star: davekellermeyer@northernstargen.com

Mr. Scott Osbourn, P.E., Golder Associates: sosbourn@golder.com

Jim Bradner, DEP CD: james.bradner@dep.state.fl.us

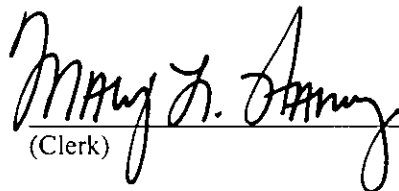
Lori Cunniff, Orange County EPD: lori.cunniff@ocfl.net

Jim Little, EPA Region 4: little.james@epamail.epa.gov

Katy Forney, EPA Region 4: forney.kathleen@epa.gov

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

11/19/07
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Draft Air Permit No. 0950203-007-AC
Northern Star Generation Services - Orlando Cogen Limited L.P.
Orlando Cogen Plant
Orange County, Florida

Applicant: The applicant for this project is the Northern Star Generation Services on behalf of Orlando Cogen Limited L.P. The applicant's authorized representative and mailing address is: Mr. Jim Murray, Plant Manager, Northern Star Generation Services, 8275 Exchange Drive; Orlando, Florida 32809.

Facility Location: The Orlando Cogen Plant is located at 8275 Exchange Drive, Orlando in Orange County, Florida.

Project: The existing facility consists of a natural gas-fired combined cycle unit. The combined cycle unit includes: a combustion turbine-electrical generator (CT); a heat recovery steam generator with a duct burner system; and a nominal 50 megawatts (MW) steam turbine-electrical generator (ST).

The permittee has submitted a permit application to replace the rotor (power) section of the CT and to physically upgrade it from an Alstom Model GT 11NM to a Model GT 11NMC by replacement of key components in the compressor section of the CT with improved ones. This upgrade will increase the nominal power rating of the CT as a result of the present and previous projects from 79 to 86.8 MW at the International Standards Organization (ISO) conditions of 59 degrees Fahrenheit and 1 atmosphere of pressure. The total power rating of the combined cycle unit including the CT and the ST is 136.8 MW.

As a result of this upgrade project, the combined cycle unit becomes subject to the Standards of Performance for Stationary Combustion Turbines at 40 Code of Federal Regulations Part 60, Subpart KKKK.

The project is largely an efficiency improvement and will allow production of additional electricity with little or no increase in fuel use. The applicant projected that emissions will not significantly increase after completion of the project compared with historical baseline actual emissions. Therefore, the project is not subject to the rules for the Prevention of Significant Deterioration (PSD) at Section 62-212.400 of the Florida Administrative Code (F.A.C.) or a determination of best available control technology.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station (MS) #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

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Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

comments received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of Public Notice. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the draft permit and require, if applicable, another Public Notice.

Petitions: The Department will issue the construction permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specified rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

DRAFT PERMIT

PERMITTEE:

Northern Star Generation Services
Orlando Cogen Limited L.P.
8275 Exchange Drive
Orlando, Florida 32809

Authorized Representative:
Mr. Jim Murray, Plant Manager

Orlando Cogen Plant
Air Permit No. 0950203-007-AC
Facility ID No. 0950203
SIC No. 4931
Permit Expires: March 31, 2009

PROJECT AND LOCATION

This permit authorizes the permittee to replace the rotor (power) section and to physically upgrade the existing Alstom combustion turbine from a Model GT 11NM to a Model GT 11NMC by replacement of key components in the compressor section.

The combustion turbine is part of a natural-gas-fired combined cycle unit that produces electrical power and steam at the existing Orlando Cogeneration Plant, which is located in Orange County at 8275 Exchange Drive, Orlando, Florida. The UTM coordinates are Zone 17, 459.5 km East, and 3146.1 km North.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Part 60 of the Code of Federal Regulations (CFR). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

(DRAFT)

Joseph Kahn, Director (Date)
Division of Air Resource Management

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The existing facility consists of a natural gas-fired combined cycle unit. The combined cycle unit includes: a Alstom combustion turbine-electrical generator (CT); a heat recovery steam generator (HRSG) with a duct burner (DB) system; and a nominal 50 megawatts (MW) steam turbine-electrical generator (ST).

This permit authorizes the permittee to replace the rotor (power) section of the CT and to physically upgrade it from a Model GT 11NM to a Model GT 11NMC by replacement of key components in the compressor section of the CT with improved ones. The upgrade will occur in conjunction with a like-kind replacement of the rotor (power) section of the CT. The permit recognizes the increase in the nominal power rating of the combustion turbine as a result of the present and previous projects from 79 to 86.8 MW at the International Standards Organization (ISO) conditions of 59 degrees Fahrenheit and 1 atmosphere of pressure. The total power rating of the combined cycle unit including the CT and the ST is 136.8 MW.

The permit also recognizes the applicability to the combined cycle unit of 40 Code of Federal Regulations Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines (Subpart KKKK).

The following emissions units (EU) are affected by this permitting action.

EU ID	Emission Unit Description (after the project)
001	A nominal 86.8 MW (ISO) Alstom Model GT 11NMC natural gas-fired combustion turbine
002	A heat recovery steam generator with a natural gas-fired duct burner system having a maximum heat input capacity of 122 million British Thermal Units per hour (MMBtu/hr)

REGULATORY CLASSIFICATION

The facility is not a major source of hazardous air pollutants (HAP).

The combined cycle unit is subject to the acid rain provisions of the Clean Air Act (CAA).

The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

The facility is a Prevention of Significant Deterioration (PSD) major source of air pollution in accordance with Rule 62-212.400, F.A.C.

The combined cycle unit is subject to 40 CFR 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines.

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department. This minor source air construction permit supplements Permit No. 0950203-005-AC issued in 2006 and the original Permit No. PSD-FL-184 issued in 1992. Unless otherwise specified, the gas turbine remains subject to the applicable terms and conditions of the two mentioned permit (and their modifications) as well as the current Title V Air Operation Permit (0950203-006-AV).

SECTION 2. ADMINISTRATIVE REQUIREMENTS

REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units regulated by this permit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (FDEP) at 2600 Blair Stone Road Mail Station (MS) #5505, Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Orange County Environmental Protection Division, 800 Mercy Drive, Orlando, Florida 32808.
3. Appendices: The following Appendices are attached as part of this permit: Appendix A (related to 40 CFR 60, Subpart A); Appendix GC (General Conditions); Appendix CC (Common Conditions); and Appendix KKKK (related to 40 CFR 60, Subpart KKKK).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Part 60 of the CFR, adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Title V Permit: The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the gas turbine upgrade to a Model GT 11NMC model and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

Combined Cycle Unit (EU-001 and 002)

This section of the permit addresses the following emissions units.

ID	Emission Unit Description (after the project)
001	A nominal 86.8 MW (ISO) Alstom Model GT 11NMC natural gas-fired combustion turbine
002	A heat recovery steam generator with a natural gas-fired duct burner system having a maximum heat input capacity of 122 million British Thermal Units per hour (MMBtu/hr)

ADMINISTRATIVE REQUIREMENTS

1. Previous Permit Conditions: Unless otherwise specified, issuance of this permit does not alter any requirements established in any previously issued air construction or Title V operation permits for the existing gas turbine. Except as specified below, the conditions of this minor air construction permit supplement, and are in addition to, all current valid requirements. [Rule 62-210.300, F.A.C.]

NEWLY APPLICABLE REGULATORY REQUIREMENTS AND EXEMPTIONS

2. New Source Performance Standards (NSPS): The combined cycle unit including the combustion turbine, heat recovery steam generator and duct burner system are subject to 40 CFR 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines. The project is subject to applicable requirements of 40 CFR 60, Subpart A – General Provisions. [Rule 62-204.800, F.A.C.; 40 CFR 60, Subparts A and KKKK]
3. Exemption from certain NSPS: Upon completion of the project, the combustion turbine regulated under 40 CFR 60, Subpart KKKK is exempt from the requirements of 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines. Upon completion of the project, the heat recovery steam generator and duct burner system regulated under 40 CFR 60, Subpart KKKK are exempted from the requirements of 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. [Rule 62-204.800, F.A.C.; 40 CFR 60.4305(b)]

PROPOSED PROJECTS

4. Rotor Replacement: The permittee is authorized to replace the rotor (power) section of the CT. [Application]
5. Gas Turbine Upgrade: The permittee is authorized to upgrade the CT from a Model GT 11NM to a Model GT 11NMC by replacing the following compressor components with improved parts:
 - Row #1 – 17 compressor blades;
 - Row #1 – 18 inlet compressor guide vanes; and
 - Stage #18 filler pieces.[Application]
6. Notifications: Within one week of beginning construction on the project, the permittee shall provide notification that construction has commenced including a schedule for completing the project. The permittee shall also provide notice if a project will not be constructed. The schedule shall be updated for any major changes as necessary. [Rule 6-4.070(3), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

Combined Cycle Unit (EU-001 and 002)

EMISSION LIMITS APPLICABLE TO EMISSIONS UNITS

7. Emission Limits: The emission limits applicable to the CT (EU 001) and the DB (EU 002) are listed in Table 1 from the original Permit No. PSD-FL-184 (reference: Specific Condition 4). Revisions and additions to the limits since their previous revision in Permit No. 0950203-005-AC (reference: Specific Condition 5) are shown as deletions in strikethrough (~~strikethrough~~) and as additions in double underline format. The maximum allowable emissions from this facility shall not exceed the following emission rates:

Table 1

Pollutant	Source	Allowable Emission Standard/Limitation
NO _x	CT	15 ppmvd @ 15% O ₂ (57.4 <u>63.1</u> lb/hr; 251.4 TPY)
	DB	0.1 lb/MMBtu
	CT/DB	24-hr rolling average
	<u>CT with DB</u>	<u>15 ppmvd @ 15% O₂ on a 30 unit-days rolling average per 40 CFR 60, Subpart KKKK</u>
CO	CT	10 ppmvd (22.3 lbs/hr; 92.1 TPY)
	DB	0.1 lb/MMBtu (12.2 lbs/hr; 22.5 TPY)
PM/PM ₁₀	CT	0.01 lb/MMBtu (9.0 <u>9.9</u> lbs/hr; 39.4 <u>43.3</u> TPY)
	DB	0.01 lb/MMBtu (1.2 lbs/hr; 2.2 TPY)
VOC	CT	3.0 <u>3.3</u> lbs/hr; 13.0 <u>14.3</u> TPY
	DB	3.7 lbs/hr; 6.8 TPY
VE	CT/DB	≤ 10% opacity
<u>SO₂</u>	<u>CT and DB</u>	<u>0.90 pounds megawatt-hour gross output or 0.060 pounds per MMBtu heat input per 40 CFR 60, Subpart KKKK)</u>

NOTE:

1. CT: combustion turbine
DB: duct burner
2. Natural gas usage only in the CT and DB.
3. Hours of operation:
 - a. CT: 8760 hrs/yr
 - b. DB: 3688 hrs/yr (at a maximum rate of 122.0 x 10⁶ Btu/hr)
4. Maximum heat input:
 - a. CT: 890 x 10⁶ Btu/hr
 - b. DB: 3688 hrs/yr (at a maximum rate of 122.0 x 10⁶ Btu/hr)
5. DB operation planned when ambient temperature is greater than 59° F.

The gas turbine remains subject to all other applicable conditions of Permit No. PSD-FL-184 and Permit No. 0950203-005-AC except as modified by Specific Conditions 2, 3 and 7 of this permit.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

Combined Cycle Unit (EU-001 and 002)

{Permitting Note: The emission limits listed in Table 1 relating to 40 CFR Part 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines and the associated requirements and conditions are contained in Appendix KKKK}

[Application No. 0950203-007-AC]

TESTING REQUIREMENTS

8. Subpart KKKK Testing Requirements: Refer to Appendix KKKK for the NO_x and SO₂ emission testing and compliance requirements pursuant to 40 CFR 60, Subpart KKKK.
9. Continuous Emissions Monitoring System (CEMS) for NO_x: The existing CEMS presently used to demonstrate compliance with the requirements in previous permits shall also be used to demonstrate compliance with the NO_x limits pursuant to 40 CFR 60, Subpart KKKK.
10. Initial CO Compliance Tests: The gas turbine shall be tested to compliance with the existing emissions standards for CO specified in the Title V permit. An initial test shall be conducted simultaneously with the testing required pursuant to 40 CFR 60, Subparts A and KKKK. The tests shall consist of at least three 1-hour test runs conducted in accordance with EPA Method 10 and EPA Methods 1-4 as necessary. For each CO test run, NO_x emissions data collected from the installed CEMS shall also be reported. Tests shall be conducted within 90% of the maximum heat input rate given actual ambient conditions.
[Rule 62-297.310(7)(a)1, F.A.C.]

ANNUAL REPORTING

11. Future Actual Emissions Reporting. The permittee shall maintain and submit to the Department on an annual basis for a period of 5 years from the date the upgraded 11 NMC combustion turbine is placed in operation, information demonstrating in accordance with Rule 62-212.300(1)(e), F.A.C., using the emissions computation and reporting procedures in Rule 62-210.370, F.A.C., that the implementation of the initiative did not result in an emissions increase of CO and NO_x that would equal or exceed the respective significant emission rate as defined in Rule 62-210.200, F.A.C. The baseline emissions for operation prior to the project are 3 tons per year of CO and 232 tons per year of NO_x.
[Rule 62-212.300(1)(e), F.A.C.]

SECTION 4. APPENDICES

CONTENTS

- Appendix A NSPS Subpart A
- Appendix GC. General Conditions
- Appendix CC. Common Conditions
- Appendix KKKK. NSPS Subpart KKKK

**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

PROJECT

Draft Air Construction Permit No. 0950203-007-AC
Upgrade of Alstom Combustion Turbine to a Model GT 11NMC
Replacement of Rotor (power) Section and Upgrade of Compressor Components

COUNTY

Orange County

APPLICANT

Orlando CoGen Limited, L.P.
(Operating Agent: Northern Star Generation Services Company, LLC)
ARMS Facility ID No. 0950203

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Air Permitting South



November 19, 2007

{Filename: 0950203-007-AC - TEPD}

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

GENERAL PROJECT INFORMATION

Northern Star Generation Services Company operates the Orlando Cogen Plant for Orlando Cogen Limited L.P. The plant is a natural gas-fired combined cycle cogeneration facility (SIC No. 4911) located at 8275 Exchange Drive in Orlando, Florida. The existing facility is subject to the following regulatory categories.

Title I, Part C, Clean Air Act (CAA): The facility is located in an area that is designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard (NAAQS). It is classified as a "fossil fuel-fired steam electric plant of more than 250 million British Thermal Unit (MMBtu) per hour of heat input", which is one of the 28 Prevention of Significant Deterioration (PSD) Major Facility Categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year, therefore the facility is classified as a "major stationary source" of air pollution with respect to Rule 62-212.400, Florida Administrative Code (F.A.C.), PSD of Air Quality.

Title I, Section 111, CAA: As a result of the upgrade discussed herein, the gas turbine and the duct burner are now subject to the New Source Performance Standards (NSPS) in Title 40 of the Code of Federal Regulations (CFR), Part 60, Subpart KKKK which supersedes 40 CFR 60, Subpart GG and 40 CFR 60 and Subpart Dc for this combined cycle unit.

Title I, Section 112, CAA: According to the applications submitted, the facility is not a "Major Source" of hazardous air pollutants (HAP).

Title IV, CAA: The facility operates units subject to the Acid Rain provisions of the Clean Air Act.

Title V, CAA: The facility is a Title V or "Major Source of Air Pollution" in accordance with Chapter 62-213, F.A.C. because the potential emissions of at least one regulated pollutant exceed 100 tons per year (TPY). Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

The combined cycle unit was originally subject to a PSD preconstruction review and determination of best available control technology (BACT) in 1992 and constructed in accordance with Permit No. PSD-FL-184. The original project included an Alstom Model GT11N1 (11N1) combustion turbine (CT) designated as Emissions Unit 001 (EU 001). The project also included EU 002 which is a duct burner (DB) located in the heat recovery steam generator (HRSG) to further augment the steam produced from the heat contained in the CT exhaust.

In April 2005 and January 2006, the Department issued Permit No. 0950203-003-AC and 0950203-005-AC to upgrade the CT from an 11N1 to a Model GT 11NM (11NM), increase the maximum heat input to the CT and install an inlet air fogging system.

Most of the power increase results from substantially improved CT cycle efficiency and is achieved with a relatively small increase in fuel input. According to the company, the improvements make it possible to reduce reliance on the less efficient DB to supply the additional energy required by the combined cycle during peak demand.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

A diagram of the very similar Model GT 11N2 from www.alstom.com is shown in Figure 1. The potential benefits of the upgrade to an 11NM are clear based on Figure 2.

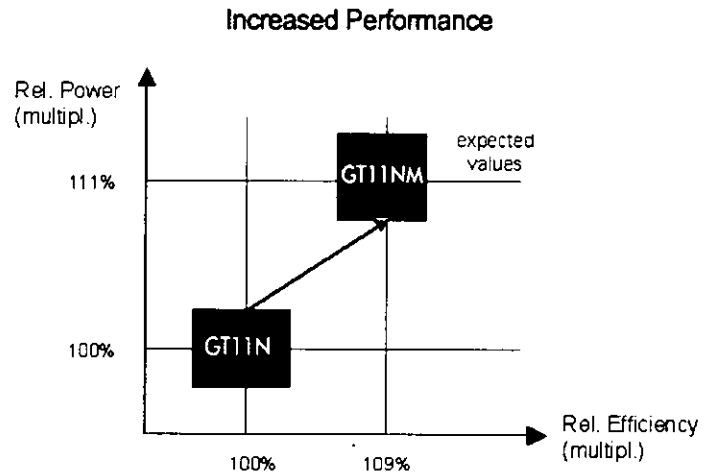
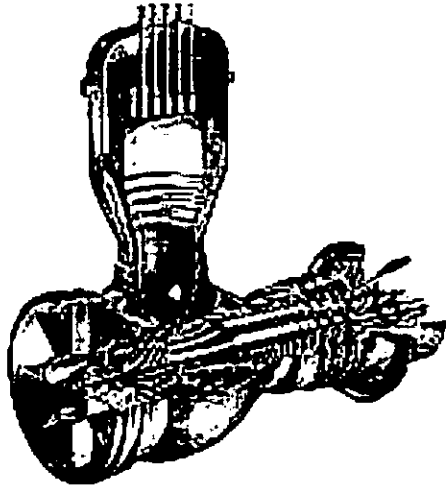


Figure 1. Model GT 11N2 diagram **Figure 2. Benefits of upgrade to Model GT 11NM**

Based on emission projections made during the previous permit evaluation, the project to upgrade to an NM configuration did not trigger a PSD review and a new BACT determination. According to the company, the project has been successful. Usage of the DB has been reduced and the inlet fogging system was not installed. A revised Title V operation permit (Permit No. 0950203-006-AV) incorporating the upgrade to an NM configuration was issued on January 24, 2006.

On August 21, 2007, the permittee submitted an air construction permit application, which is addressed by this Technical Evaluation and Preliminary Determination (TEPD), requesting authorization to further upgrade the existing Alstom gas turbine (EU 001) from an 11NM configuration to a GT 11NMC (11NMC). The upgrade involves the replacement of the CT air compression section with a more efficient one.

The upgrade to an NMC will occur simultaneously with the replacement of the CT rotor (power) section. According to the applicant, the compressor upgrade will consist of the following replacement parts:

- Row #1 – 17 compressor blades;
- Row #1 – 18 inlet compressor guide vanes; and
- Stage #18 filler pieces.
- Improvements to the blow off valve, startup piping and the inlet bell mouth assembly.

According to the applicant, the improved compressor blade design will result in an increase in compressor discharge pressure, which in turn produces an increase in the total mass flow through the turbine. The increase in air flow allows increased fuel firing and power output at approximately the same heat input rate. There will also be less reliance on the less efficient DB during peak demand periods.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

According to the applicant, upgrading to a NMC gas turbine will result in a further increase in CT power output, further decreases in DB usage and overall improved cycle efficiency.

KEY APPLICABLE REGULATIONS

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is not a major emitter of HAP. Consequently, 40 CFR 63, Subpart YYYYY - National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines does not apply to this combined cycle unit.

New Source Performance Standards (NSPS)

When originally permitted, the CT was subject to 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines (Subpart GG). This federal standard and those mentioned below were adopted by reference in Rule 62-204.800, F.A.C. The DB was subject to 40 CFR 60, Subpart Dc - Small Industrial-Commercial-Institutional Steam Generating Units. Subpart (Dc).

Because the project will increase emissions, at least on a short term basis, the CT will be subject to the more stringent 40 CFR 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (Subpart KKKK). Subpart KKKK regulates the emissions of SO₂ and NO_x from stationary CT and associated DB and HRSG with construction or modification commencing after February 18, 2005.

As a result of the newly applicable and more stringent requirements, Subpart GG and Subpart Dc will no longer apply to the combined cycle unit.

The emissions of SO₂ involve the choice of two limits in Subpart KKKK. The SO₂ limit can either be based on mass per gross power output or mass per heat input basis as summarized below:

- 0.90 pounds SO₂ per megawatt-hour gross output (lb/MWH); or
- 0.060 pounds SO₂ per MMBtu heat input (lb/MMBtu).

According to the permittee, the Orlando Cogeneration facility uses pipeline quality natural gas, which because of its low sulfur content of approximately 2.0 grains (gr) per 100 standard cubic foot (scf), will allow the permittee to meet either of these emissions targets with a large margin of compliance.

For NO_x emissions, based on the maximum heat input rate of greater than 850 MMBtu/hr, in Table 1 of Subpart KKKK there is a choice of two emission limits. One limit is based on the NO_x concentration in the effluent gas while the other is based on mass per power output. These two NO_x emission limits are summarized below:

- 15 parts per million by volume, dry at 15 percent oxygen (ppmvd); or
- 0.43 pounds per megawatt-hour gross power output (lb/MWH).

The 15 ppmvd NO_x limit listed above is the same numerical BACT limit set in the original PSD permit. However, the permitted emission limit is based on a 24 hour rolling average and applies only to the CT. The Subpart KKKK NO_x emission limit includes both the CT and the DB and is based on a 30 unit day rolling average. Consequently, once the combustion turbine is modified, the facility will have to meet both NO_x emission limits.

DETERMINATIONS WHETHER THE PROJECT CONSTITUTES A MODIFICATION

Modification and Permitting Applicability

Per Rule 62-210.200(Definitions), F.A.C., a modification is defined as follows:

“Modification” – Any physical change in, the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.

(a) *A physical change or change in the method of operation shall not include:*

1. *Routine maintenance, repair, or replacement of component parts of an emissions unit; or*
2. *A change in ownership of an emissions unit or facility.*

(b) *For any pollutant that is specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975.*

(c) *For any pollutant that is not specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would exceed any restriction on hours of operation or production rate included in any applicable Department air construction or air operation permit.*

The upgrade from an 11NM to an 11NMC is a physical change and it is not routine maintenance, repair or replacement of component parts of an emissions unit.

Per Rule 62-210.200(11), F.A.C., a “Actual Emissions” is defined as follows:

“Actual Emissions” – The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

- (a) *In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department shall allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit’s actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.*
- (b) *The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that such unit-specific allowable emissions limits are federally enforceable.*
- (c) *For any emissions unit that has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.*

Any comparison of recent actual emissions per (a) above with allowable or potential emissions per (b) or (c) above will result in an increase of emissions. Additionally, the applicant acknowledges that there can be short term emissions increases from the CT associated with the upgrade. This meets the definition of modification at 40 CFR 60, Subpart A – General Provisions (Section 60.2, Definitions), also adopted at Rule 62-204.800, F.A.C.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Based on the foregoing analysis, the project to upgrade the 11NM to an 11 NMC constitutes a modification with respect to the Department's rules and requires a construction permit in accordance with Rule 62-210, F.A.C.

Major Modification and PSD Permitting Applicability

It is also necessary to determine whether the modification is subject to the Department's PSD rules at 62-212.400, F.A.C. The requirements of Sections 62-212.400(4) through (12), F.A.C., apply to major modifications of existing major stationary source. The key criterion is a comparison of *baseline actual* to *projected actual* emissions. Baseline actual emissions are defined for electric utility steam units at Section 62-210.200(Definitions), F.A.C. as follows:

*For any existing electric utility steam generating unit, **baseline actual emissions** means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date a complete permit application is received by the Department. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation.*

Projected future actual emissions are defined at Section 62-210.200(248) as follows:

"Projected Actual Emissions" – The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a PSD pollutant in any one of the 5 years following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that PSD pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source. One year is one 12-month period. In determining the projected actual emissions, the Department:

- (a) Shall consider all relevant information, including historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans or orders, including consent orders; and*
- (b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns; and*
- (c) Shall exclude that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project including any increased utilization due to product demand growth; or*
- (d) In lieu of using the method set out in paragraphs (a) through (c) above, may be directed by the owner or operator to use the emissions unit's potential to emit, in tons per year.*

A major modification requires a PSD permit and is defined at Section 62-210.200(Definitions), F.A.C. as follows:

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

*“Major Modification” – (a) Any physical change in or change in the method of operation of a major stationary source that would result in a **significant emissions increase** of a PSD pollutant and a **significant net emissions increase** of that pollutant from the major stationary source.*

Significant emissions rate, for the purpose of determining whether a significant net emissions increase (SNEI) has occurred, is defined at 62-210.200(Definitions), F.A.C. The part of the definition that includes CO and NO_x are as follows:

(a) With respect to any emissions increase or any net emissions increase, or the potential of a facility to emit any of the following pollutants, significant emissions rate means a rate of pollutant emissions that would equal or exceed:

- 1. A rate listed at 40 CFR 52.21(b)(23)(i), adopted by reference at Rule 62-204.800, F.A.C.; specifically, any of the following rates:*
 - a. Carbon monoxide: 100 tons per year (tpy);*
 - b. Nitrogen oxides: 40 tpy;*

The significant emissions rates (SER) for CO and NO_x are low compared with the typical annual emissions from combined cycle units. Therefore the possibility of a SNEI for CO or NO_x is a consideration.

The applicant submitted a summary of emissions data for the period 2001-2006. There is some uncertainty regarding the precise five-year period to select for determination of the applicable 24-month period for estimation of baseline actual emissions. This is because a partial upgrade to an 11NM that occurred in 2005 that is being aggregated in the present review with the further upgrade to an 11NMC. Also year 2001 is outside of the five year window. It could still be considered in the revised analysis. The issue is moot because the 24-month period of 2002-2003 has been selected for all pollutants listed in the table below. This period would be available under any scenario.

Table 1. Baseline actual emissions submitted by the applicant (CT and DB combined).

Year of Operation	NO_x (TPY)	SO₂ (TPY)	CO (TPY)	PM/PM₁₀ (TPY)	VOC (TPY)
2001	241	2	4	31	14
2002	225	2	3	32	14
2003	240	3	3	33	17
2004	143	2	3	26	15
2005	196	2	3	29	14
2006	198	2	4	31	15
<i>Baseline Actual Emissions (24-month period)</i>	233 (2002-03)	3 (2002-03)	3 (2002-03)	33 (2002-03)	16 (2002-03)

The applicant has projected future actual emissions and based them on the high level of dispatch achieved in 2006. The estimates are shown in the following table.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Table 2. Projected actual emissions submitted by the applicant (CT and DB combined)

Year of Operation	NO_x (TPY)	SO₂ (TPY)	CO (TPY)	PM/PM₁₀ (TPY)	VOC (TPY)
Beyond 2008	217	3	4	34	16

Following is a comparison of baseline actual emissions with projected actual emissions to determine the applicability of PSD.

Table 3. Projected actual emissions submitted by the applicant (CT and DB combined)

	NO_x (TPY)	SO₂ (TPY)	CO (TPY)	PM/PM₁₀ (TPY)	VOC (TPY)
Baseline actual emissions	233	3	3	33	16
Beyond 2008	217	3	4	34	16
Increase (decrease)	(16)	0	1	1	0
SNEI	40	40	100	25/15	40
Trigger PSD?	No	No	No	No	No

Based on the information submitted by the applicant, the project to upgrade the combustion turbine from a Model GT 11NM to a Model GT 11NMC will not trigger a PSD review or a BACT determination.

The Department concludes that the project does not constitute a major stationary source modification and that a PSD review does not apply and a BACT determination is not required.

DRAFT PERMIT CONDITIONS

The main permit conditions will be to: authorize the replacement of the rotor section; replace key compressor components with improved ones; include the requirements of 40 CFR 60, Subpart KKKK; exempt the facility from the requirements of 40 CFR 60 Subparts GG and Dc; update the emission limits and power capacity rating; and require reporting of future actual emissions. The combined cycle unit shall remain subject to all other valid terms and conditions in the original PSD air construction and Title V air operation permit.

PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does trigger a PSD review.

David Read is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or by phone at 850-414-7268.

Harvey, Mary

From: Harvey, Mary
Sent: Monday, November 19, 2007 3:51 PM
To: 'jim.murray@northernstargen.com'; 'davekellermeyer@northernstargen.com'; 'sosbourn@golder.com'; Bradner, James; 'lori.cunniff@ocfl.net'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'
Cc: Linero, Alvaro; Adams, Patty; Gibson, Victoria
Subject: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Attachments: COVER-0950203-007-AC-DRAFT.pdf; NOTICES-0950203-007-AC-DRAFT.pdf; TECHNICAL-0950203-007-AC-DRAFT.pdf; DRAFTPERMIT-0950203-007-AC-DRAFT.pdf

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12/11/2007

Harvey, Mary

From: Kellermeyer, Dave [dave.kellermeyer@northernstargen.com]
Sent: Tuesday, December 11, 2007 3:45 PM
To: Harvey, Mary
Subject: RE: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Received.

Regards,

Dave Kellermeyer

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Tuesday, December 11, 2007 2:41 PM
To: Kellermeyer, Dave
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

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Sent: Tuesday, November 20, 2007 11:55 AM
To: 'dave.kellermeyer@northernstargen.com'
Cc: Read, David; Adams, Patty
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

From: Harvey, Mary
Sent: Monday, November 19, 2007 4:41 PM
To: Read, David
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

From: Harvey, Mary
Sent: Monday, November 19, 2007 3:51 PM
To: 'jim.murray@northernstargen.com'; 'davekellermeyer@northernstargen.com'; 'sosbourn@golder.com'; Bradner, James; 'lori.cunniff@ocfl.net'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'
Cc: Linero, Alvaro; Adams, Patty; Gibson, Victoria

12/11/2007

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To: Harvey, Mary
Sent: Monday, November 19, 2007 4:51 PM
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Your message

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To: Harvey, Mary
Sent: Tuesday, November 20, 2007 7:15 AM
Subject: Read: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

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Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
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To: undisclosed-recipients
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To: Harvey, Mary
Sent: Monday, November 19, 2007 5:03 PM
Subject: Read: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: 'jim.murray@northernstargen.com'; 'davekellermeyer@northernstargen.com'; 'sosbourn@golder.com'; Bradner, James; 'lori.cunniff@ocfl.net'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'
Cc: Linero, Alvaro; Adams, Patty; Gibson, Victoria
Subject: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Sent: 11/19/2007 3:51 PM

was read on 11/19/2007 5:03 PM.

Harvey, Mary

From: Murray, Jim [jim.murray@northernstargen.com])
Sent: Monday, November 19, 2007 4:01 PM
To: Harvey, Mary
Subject: RE: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Received
 JIM

James T Murray
 407-851-1350 ext.2022

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Monday, November 19, 2007 3:51 PM
To: Murray, Jim; davekellermeyer@northernstargen.com; sosbourn@golder.com; Bradner, James; lori.cunniff@ocfl.net; little.james@epamail.epa.gov; forney.kathleen@epa.gov
Cc: Linero, Alvaro; Adams, Patty; Gibson, Victoria
Subject: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

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DEP, Bureau of Air Regulation

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11/19/2007

Harvey, Mary

From: Murray, Jim [jim.murray@northernstargen.com]
To: Harvey, Mary
Sent: Monday, November 19, 2007 3:56 PM
Subject: Read: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: jim.murray@northernstargen.com
Subject:

was read on 11/19/2007 3:56 PM.

Harvey, Mary

From: Adams, Patty
To: Harvey, Mary
Sent: Monday, November 19, 2007 4:05 PM
Subject: Read: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: 'jim.murray@northernstargen.com'; 'davekellermeyer@northernstargen.com'; 'sosbourn@golder.com'; Bradner, James; 'lori.cunniff@ocfl.net'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'
Cc: Linero, Alvaro; Adams, Patty; Gibson, Victoria
Subject: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Sent: 11/19/2007 3:51 PM

was read on 11/19/2007 4:05 PM.

Harvey, Mary

From: ~~Linero, Alvaro~~
To: Harvey, Mary
Sent: Monday, November 19, 2007 4:14 PM
Subject: Read: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: Linero, Alvaro
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Sent: 11/19/2007 3:56 PM

was read on 11/19/2007 4:14 PM.

Harvey, Mary

From: Lori.Cunniff@ocfl.net
To: Harvey, Mary
Sent: Monday, November 19, 2007 3:56 PM
Subject: Read: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: Lori.Cunniff@ocfl.net
Subject:

was read on 11/19/2007 3:56 PM.

Harvey, Mary

From: Read, David
To: Harvey, Mary
Sent: Tuesday, November 20, 2007 1:12 PM
Subject: Read: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: 'dave.kellermeyer@northernstargen.com'
Cc: Read, David; Adams, Patty
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Sent: 11/20/2007 11:55 AM

was read on 11/20/2007 1:11 PM.

Harvey, Mary

From: Adams, Patty
To: Harvey, Mary
Sent: Tuesday, November 20, 2007 12:07 PM
Subject: Read: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: 'dave.kellermeyer@northernstargen.com'
Cc: Read, David; Adams, Patty
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Sent: 11/20/2007 11:55 AM

was read on 11/20/2007 12:07 PM.

Harvey, Mary

From: Adams, Patty
To: Harvey, Mary
Sent: Monday, November 19, 2007 4:25 PM
Subject: Read: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Your message

To: Adams, Patty
Subject: FW: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT
Sent: 11/19/2007 4:22 PM

was read on 11/19/2007 4:25 PM.

Harvey, Mary

From: Bradner, James
Sent: Friday, November 30, 2007 7:48 AM
To: Harvey, Mary
Subject: RE: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Here's my reply in case I missed this the first time. Thanks!

From: Harvey, Mary
Sent: Monday, November 19, 2007 3:51 PM
To: 'jim.murray@northernstargen.com'; 'davekellermeyer@northernstargen.com'; 'sosbourn@golder.com'; Bradner, James; 'lori.cunniff@ocfl.net'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'
Cc: Linero, Alvaro; Adams, Patty; Gibson, Victoria
Subject: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

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Thank you,

DEP, Bureau of Air Regulation

Harvey, Mary

From: Forney.Kathleen@epamail.epa.gov
Sent: Monday, November 26, 2007 2:51 PM
To: Harvey, Mary
Subject: Re: Orlando Cogen, LLP - DEP File #0950203-007-AC-DRAFT

Attachments: COVER-0950203-007-AC-DRAFT.pdf; NOTICES-0950203-007-AC-DRAFT.pdf;
TECHNICAL-0950203-007-AC-DRAFT.pdf; DRAFTPERMIT-0950203-007-AC-DRAFT.pdf



COVER-0950203-00NOTICES-0950203-TECHNICAL-095020DRAFTPERMIT-095
7-AC-DRAFT.pdf... 007-AC-DRAFT.p... 3-007-AC-DRAFT...0203-007-AC-DRA...

My email showed I responded to this one, but maybe it got lost in the electronic abyss...
thanks,
Katy

Katy R. Forney
Air Permits Section
EPA - Region 4
61 Forsyth St., SW
Atlanta, GA 30024

Phone: 404-562-9130
Fax: 404-562-9019

"Harvey, Mary"
<Mary.Harvey@dep
.state.fl.us>

11/19/2007 03:51
PM

To
<jim.murray@northernstargen.com>,
<davekellermeier@northernstargen.
com>, <sosbourn@golder.com>,
"Bradner, James"
<James.Bradner@dep.state.fl.us>,
<lori.cunniff@ocfl.net>, James
Little/R4/USEPA/US@EPA, Kathleen
Forney/R4/USEPA/US@EPA

CC

"Linerio, Alvaro"
<Alvaro.Linerio@dep.state.fl.us>,
"Adams, Patty"
<Patty.Adams@dep.state.fl.us>,
"Gibson, Victoria"
<Victoria.Gibson@dep.state.fl.us>

Subject

Orlando Cogen, LLP - DEP File
#0950203-007-AC-DRAFT

Dear Sir/Madam: