TO:

Trina Vielhauer

THROUGH:

Al Linero

FROM:

David Read

DATE:

August 25, 2008

OUC Curtis H. Stanton Energy Center

SUBJECT:

DEP File Nos. 0950137-025-AC and 0950137-011-AC Removal of  $NO_X$  emissions cap on Stanton Units 1 and 2

Modification of dibasic acid (DBA) and neural network (NN) Project

J 8/25

This project is subject to minor source preconstruction review. It is actually a change to a project permitted under the major source preconstruction review rules and still under construction. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit Modification;
- Public Notice of Intent to Issue Air Permit Modification;
- Technical Evaluation and Preliminary Determination;
- Draft Permit (letter) Modification; and
- P.E. Certification.

On August 13, 2008, OUC submitted a permit modification application requesting removal of the nitrogen oxides emissions (NO<sub>X</sub>) cap applicable to Units 1 and 2. The cap was included in a project to install DBA and NN systems on Units 1 and 2. The cap was unrelated to the DBA and NN project but was required in a federally enforceable permit to avoid triggering a prevention of significant deterioration (PSD) review for NO<sub>X</sub> on the separately permitted integrated coal gasification and combined cycle (IGCC) project originally planned as Stanton Unit B.

Recently the Department issued a PSD permit for a natural gas-fueled combined cycle (NGCC) project as Stanton Unit B in lieu of the since-cancelled IGCC project. The PSD permit included a determination of best available control technology (BACT) for NO<sub>X</sub> emissions from Stanton Unit B. Therefore, the NO<sub>X</sub> emissions cap on Units 1 and 2 is not required to avoid triggering PSD for NGCC version of Stanton Unit B.

I recommend your approval of the attached Draft Permit package.

Attachments

#### PROFESSIONAL ENGINEER CERTIFICATION STATEMENT

PERMITTEE
Orlando Utilities Commission (OUC)
Post Office Box 3193
Orlando, Florida 32802

DEP File No. 0950137-025-AC Curtis H. Stanton Energy Center Units 1 and 2 Removal of NO<sub>X</sub> Emissions Cap Orange County, Florida

**Project**: On August 13, 2008, OUC submitted a permit modification application requesting removal of the nitrogen oxides (NO<sub>X</sub>) emissions cap applicable to Units 1 and 2. The cap was included in a project to install dibasic acid and neural network systems on Units 1 and 2. The cap was unrelated to the project but was required in a federally enforceable permit applicable to Units 1 and 2 to avoid triggering a prevention of significant deterioration (PSD) review for NO<sub>X</sub> on the integrated coal gasification and combined cycle (IGCC) project originally planned as Stanton Unit B.

Recently the Department issued a PSD permit for a natural gas-fueled combustion cycle (NGCC) project as Stanton Unit B in lieu of the since-cancelled IGCC project. NO<sub>X</sub> emissions from the replacement NGCC version will be less than 10 percent of the emissions from the cancelled IGCC project. The PSD permit included a determination of best available control technology (BACT) for NO<sub>X</sub> emissions from Stanton Unit B. Therefore, the NO<sub>X</sub> emissions cap on Units 1 and 2 is not required to avoid triggering PSD for Stanton Unit B.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).

Alvaro A. Linero, P.E.

Registration Number: 26032

(Date)





# Florida Department of Environmental Protection

Bob Martinez Center 2600 Blairstone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor Jeff Kottkamp Lt. Governor Michael W. Sole Secretary

August 27, 2008

Electronically Sent - Received Receipt Requested.

Ms. Denise Stalls <u>DStalls@ouc.com</u> Vice President Environmental Affairs Orlando Utilities Commission (OUC) 500 South Orange Avenue Post Office Box 3193 Orlando, Florida 32802

Re: DEP File No. 0950137-025-AC

Removal of Nitrogen Oxides (NO<sub>X</sub>) Emissions Cap Curtis H. Stanton Energy Center Units 1 and 2

Dibasic Acid Additive (DBA) System and Neural Network (NN) Project

#### Dear Ms. Stalls:

On August 13, 2008, OUC submitted a permit modification application requesting removal of the  $NO_X$  emissions cap applicable to Stanton Units 1 and 2 (reference Permit No. 0950137-011-AC). Enclosed are the following documents:

- Written Notice of Intent to Issue Air Permit Modification;
- Public Notice of Intent to Issue Air Permit Modification;
- Technical Evaluation and Preliminary Determination;
- Draft Permit (letter) Modification.

The Public Notice of Intent to Issue Air Permit Modification is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, David Read, at (850) 414-7236 or A. A. Linero, Program Administrator at (850) 921-9523.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

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TLV/aal/dr

**Enclosures** 

#### WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

In the Matter of an Application for Air Permit by:

Ms. Denise Stalls, V.P. Environmental Affairs Authorized Representative Orlando Utilities Commission (OUC) Post Office Box 3193 Orlando, Florida 32802 DEP File No. 0950137-025-AC Curtis H. Stanton Energy Center Units 1 and 2 Removal of NO<sub>X</sub> Emissions Cap Dibasic Acid and Neural Network Projects Orange County, Florida

**Facility Location:** The applicant, OUC, operates the existing Curtis H. Stanton Energy Center, which is located in Orange County at 5100 South Alafaya Trail, Orlando, Florida.

**Project**: On August 13, 2008, OUC submitted a permit modification application requesting removal of the nitrogen oxides emissions (NO<sub>X</sub>) cap applicable to Units 1 and 2. The cap was included in a project to install dibasic acid and neural network systems on Units 1 and 2. The cap was unrelated to the project but was required in a federally enforceable permit applicable to Units 1 and 2 to avoid triggering a prevention of significant deterioration (PSD) review for NO<sub>X</sub> on the integrated coal gasification and combined cycle (IGCC) project originally planned as Stanton Unit B.

Recently, the Department issued a PSD permit for a natural gas-fueled combined cycle (NGCC) project as Stanton Unit B in lieu of the since-cancelled IGCC project. The PSD permit included a determination of best available control technology (BACT) for NO<sub>X</sub> emissions from Stanton Unit B. Therefore, the NO<sub>X</sub> emissions cap on Units 1 and 2 is not required to avoid triggering PSD for Stanton Unit B.

**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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit Modification, the applications, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. In addition, electronic copies of these documents are available by entering the file number provided above where indicated on the following web site:

http://www.dep.state.fl.us/air/eproducts/apds/default.asp .

**Notice of Intent to Issue Permit Modification:** 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 the 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 comment 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 Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 when and how each petitioner received notice of the agency

#### WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority'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, F.A.C.

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 Written 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 in this proceeding.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

# **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit Modification, the Public Notice of Intent to Issue Air Permit and the Draft Permit) was sent by electronic mail with received receipt requested before the close of business on to the persons listed below.

Denise Stalls, OUC: dstalls@ouc.com

Jim Bradner, DEP CD: james.bradner@dep.state.fl.us
Lori Cunniff, Orange County EPD: lori.cunniff@ocfl.net
Katy Forney, EPA Region 4: forney.kathleen@epa.gov
Larry Todd, Newland, Black & Veatch: newlandlt@bv.com
Mike Halpin, DEP Siting: mike.halpin@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.

#### PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Permit No. 0950137-025-AC
Orlando Utilities Commission
Curtis H. Stanton Energy Center Combined Cycle Units 1 and 2
Orange County

**Applicant:** The applicant for this project is the Orlando Utilities Commission (OUC). The applicant's authorized representative and mailing address is: Ms. Denise Stalls, Vice President, Environmental Affairs, Orlando Utilities Commission, Post Office Box 3193, Orlando, Florida 32802.

Facility and Location: OUC operates the existing Curtis H. Stanton Energy Center, which is located in Orange County at 5100 South Alafaya Trail, Orlando, Florida. The UTM coordinates for the site are 483.6 km East and 3151.1 North. The existing facility consists of two fossil fuel fired steam electric generating units (Stanton Units 1 and 2), and one natural gas-fueled combined cycle unit (Stanton Unit A). Another natural gas-fueled combined cycle (NGCC) unit (Stanton B) is under construction. There are storage and handling facilities for solid fuels, fly ash, limestone, gypsum, slag, and bottom ash.

**Project**: On August 13, 2008, OUC submitted a permit modification application requesting removal of the nitrogen oxides (NO<sub>X</sub>) emissions cap applicable to Units 1 and 2. The cap was included in a project to install dibasic acid and neural network systems on Units 1 and 2. The cap was unrelated to the project but was required in a federally enforceable permit applicable to Units 1 and 2 to avoid triggering a prevention of significant deterioration (PSD) review for NO<sub>X</sub> on the integrated coal gasification and combined cycle (IGCC) project originally planned as Stanton Unit B.

Recently, the Department issued a PSD permit for a NGCC project as Stanton Unit B in lieu of the since-cancelled IGCC project. The PSD permit included a determination of best available control technology (BACT) for NO<sub>X</sub> emissions from Stanton Unit B. Therefore, the NO<sub>X</sub> emissions cap on Units 1 and 2 is not required to avoid triggering PSD for Stanton Unit B.

**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 modification 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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit Modification, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. In addition, electronic copies of these documents are available by entering the file number provided above where indicated on the following web site:

http://www.dep.state.fl.us/air/eproducts/apds/default.asp .

**Notice of Intent to Issue Permit Modification:** 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 the 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 comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Permitting Authority'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, F.A.C.

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. 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 in this proceeding.

Orlando Utilities Commission (OUC)
Curtis H. Stanton Energy Center Units 1 & 2

Removal of Nitrogen Oxides (NO<sub>X</sub>) Emissions Cap

Orange County

DEP File No. 0950137-025-AC Modification of Permit No. 0950137-011-AC



Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Special Projects Section

August 27, 2008

# **Facility Description and Location**

The OUC Stanton Energy Center (the Stanton Plant) consists of: two 468 megawatts (MW) fossil fuel-fired steam electric generating units (Units 1 and 2) that began operation in 1987 and 1996 respectively; a 640 MW gas-fueled combined cycle unit (Unit A) that began operation in 2003; and a nominal 300 MW gas-fueled combined cycle unit (Unit B) that is under construction.

The Stanton Plant is located in Orange County, Southeast of Orlando and North of Highway 528 at 5100 South Alafaya Trail. The site is located 144 kilometers (km) southeast from the Chassahowitzka National Wildlife Area; the nearest Federal PSD Class I Area. The UTM coordinates for this site are 483.6 km East and 3151.1 km North. The location of the Stanton Plant is shown below.





Location of the Stanton Plant near Orlando and Stanton Units 1 and 2.

# **Facility Regulatory Categories**

<u>Title III</u>: The existing facility is identified as a potential major source of hazardous air pollutants (HAP).

<u>Title IV</u>: The existing facility has units subject to the acid rain provisions of the Clean Air Act.

<u>Title V</u>: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.)

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

#### **Project Description and Analysis**

OUC submitted an application for a modification of Permit No. 0950137-011-AC. The permit authorized installation of a dibasic acid (DBA) additive system on the wet flue gas desulfurization (wet FGD) scrubbers and a combustion optimization neural network-based (NN) on Units 1 and 2. The requested modification is removal of a combined NO<sub>X</sub> emissions cap of 8,300 tons per year (TPY) on Units 1 and 2. The affected permit is at the following link:

#### www.dep.state.fl.us/Air/permitting/construction/ouc-stanton/stanton unit/011FPermit.pdf

The cap was unrelated to the project but was required in a federally enforceable permit applicable to Units 1 and 2 to avoid triggering a PSD review for NO<sub>X</sub> on an integrated coal gasification and combined cycle (IGCC) project originally planned as Unit B. The purpose of and calculations associated with establishment of the cap are given at the following link:

# www.dep.state.fl.us/Air/permitting/construction/ouc southern/oucnetting.pdf

The cap would have applied beginning the first month of first fire of the IGCC project. That date would have occurred sometime between 2010 and 2012. The IGCC project for which the cap was needed was replaced with a natural gas-fueled combined cycle (NGCC) project, for which a PSD permit was issued in May, 2008. Unlike the cancelled IGCC project, the replacement project was subjected to a PSD review and a determination of best available control technology (BACT) for NO<sub>X</sub>. The PSD review and BACT determination for the NGCC Unit B are available in the document at the following link:

# www.dep.state.fl.us/Air/permitting/construction/ouc-stanton/TECHNICAL373A.pdf

The DBA and NN permit for Units 1 and 2 was issued at about the same time as the permit for the IGCC version of the Unit B project. The DBA and NN permit provided a convenient opportunity to include the cap affecting the Units 1 and 2.

Because the IGCC project was cancelled and the replacement NGCC project subjected to PSD and BACT for NO<sub>X</sub>, the emission cap is not necessary. Because construction was not completed on the IGCC project, Units 1 and 2 have not yet been required to operate under the requirements of the emissions cap.

Another important consideration is that the cancelled IGCC version of Unit B was permitted to emit 1006 TPY of NO<sub>X</sub>. The replacement NGCC project was permitted to emit only 80 TPY of NO<sub>X</sub>. A full comparison of the emissions from the two versions of the project is shown in the following table:

Pollutants	IGCC Case Potential Emissions (TPY)	NGCC Case Potential Emissions (TPY)
Carbon Monoxide (CO)	654	163
Nitrogen Oxides (NO <sub>X</sub> )	1006 (-19)*	80
Particulate Matter (PM/PM <sub>10</sub> )	189/179	110/109
Sulfuric acid mist (SAM)	22.4	8
Sulfur Dioxide (SO <sub>2</sub> )	162	55
Volatile Organic Compounds (VOC)	129	19

<sup>\*</sup> Negative value is after consideration of concurrent reductions from Units 1 and 2.

Besides the DBA and NN projects on Units 1 and 2, OUC is presently implementing a project on the same units to install or upgrade low  $NO_X$  burners (LNB) and overfire air (OFA) during outages in spring and fall 2008. The project reference is Permit No. 0950137-015-AC (PSD-FL-395). The details are described in the technical evaluation available at the following link:

#### www.dep.state.fl.us/Air/permitting/construction/ouc-stanton/TECHNICAL015.pdf

Notwithstanding the vacature of the Clean Air Interstate Rule (CAIR), OUC will implement the measures (LNB and OFA) that will achieve reductions in NO<sub>X</sub> emissions irrespective of the described NO<sub>X</sub> emissions cap.

For reference, in 2007 NO<sub>X</sub> emissions from Units 1 and 2 were 6,170 and 2,590 TPY respectively or combined emissions of 8,760. A reasonable expectation is that the LNB and OFA project on Unit 1 will reduce its NO<sub>X</sub> emissions by at least 1,000 TPY.

Given the foregoing discussion, it is reasonable to predict that measured  $NO_X$  emissions from the Stanton Plant will likely be less in the future than during the past whether or not the cap is maintained on Units 1 and 2.

# Proposed Changes to Permit No. 0950137-011-AC

Because the NO<sub>X</sub> emissions cap is in a federally enforceable permit, a permit modification is needed to remove the applicable requirement. Following are the proposed changes to the subject permit in strike through (strike through) and double underline format.

# Section I, General Information, Facility Description

The existing facility consists of two 468 MW fossil fuel fired steam electric generating stations (Units 1 and 2), and one 640 MW combined cycle unit. There are storage and handling facilities for solid fuels, fly ash, limestone, gypsum, slag, and bottom ash. A draft PSD permit was recently issued for the construction of a nominal 285 300 MW integrated gasification natural gas-fueled combined cycle unit (Unit B) planned to be operational by 2012.

# Section III, Specific Condition 4

- 4. NO<sub>X</sub> Emissions Cap: Units 1 and 2 will meet the following NO<sub>X</sub> emissions limits.
  - a. Existing Units 1 and 2: The combined NO<sub>X</sub> emissions from existing coal fired boiler steam electric generating Stanton Unit 1 and Stanton Unit 2 shall not exceed 8,300 tons per year on a 12-month rolling total. Total NO<sub>X</sub> emissions shall be based on data collected from the Unit 1 and Unit 2 NO<sub>X</sub>-CEMS. Compliance shall be determined after each calendar month by calculating the total emissions from that calendar month and the last 11 calendar months beginning the first month of first fire of IGCC Unit B and thereafter.
  - b. If the combined NO<sub>X</sub> emissions from Units 1 and 2 exceed 8,300 tons during any 12-month period, and/or the total NO<sub>X</sub> emissions from Unit B exceeds 1,006 tons during any 12-month period, Unit B shall be subject to PSD preconstruction review at that time, and a determination of BACT for NO<sub>X</sub>-shall be made.
  - e. For purposes of meeting the NO<sub>X</sub> emissions caps, annual emission of NO<sub>X</sub> from existing Units 1 and 2, and Unit B shall be calculated with no allowable data exclusions. All valid hours of data (including startup and shutdown) must be included in the rolling 12-month totals. Also, the data substitution procedures of Part 75 for missing data shall not be used in these calculations.

[62-210.200 (net emissions increase), 62-210.370 (emissions computation), and 62-212.400(12) (Source Obligation), F.A.C.]

{Permitting Note: IGCC Unit B did not trigger PSD for NO<sub>X</sub> due to a NO<sub>X</sub> emissions cap taken on existing coal fired boiler steam electric generating Unit 1 and Unit 2. The above conditions establish the requirements for meeting the NO<sub>X</sub> emissions limitations for purposes of avoiding PSD preconstruction review by Unit B. These requirements in no way supersede any federal requirement of the applicable NSPS or NESHAP provisions.}

# Section III, Specific Condition 6

6. <u>SIP Quarterly Report</u>: In addition to, and included in, the SIP quarterly excess emissions report required for Unit B the permittee shall submit a report to the Compliance Authority summarizing the previous three 12-month totals of NO<sub>X</sub>-emissions from Units 1 and 2. The quarterly report is due within 30 days following the end of each calendar-quarter. [Rule 62-4.070, F.A.C.]

#### 2. 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 not result in a significant increase in emissions. Al Linero 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.

# Livingston, Sylvia

From:

Livingston, Sylvia

Sent:

Wednesday, August 27, 2008 5:03 PM

To:

Linero, Alvaro; Read, David

Cc:

Walker, Elizabeth (AIR): Gibson, Victoria

Subject:

FW: OUC Stanton Energy Center; 0950137-025-AC

From:

Livingston, Sylvia

Sent:

Wednesday, August 27, 2008 4:58 PM

To:

'dstalls@ouc.com'

Cc:

Bradner, James; 'lori.cunniff@ocfl.net'; 'forney.kathleen@epa.gov'; 'newlandlt@bv.com'; Halpin, Mike

Subject: OUC Stanton Energy Center; 0950137-025-AC

#### Dear Sir/Madam:

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This is the official notification of the **Draft Permit** and its associated documents for the following project:

Owner/Company Name: ORLANDO UTILITIES COMMISSION

Facility Name: STANTON ENERGY CENTER

Project Number: 0950137-025-AC

Permit Status: DRAFT

Permit Activity: CONSTRUCTION/ Removal of Nitrogen Oxides (NOX) Emissions Cap

Facility County: ORANGE

Processor: David Read/ Al Linero

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0950137.025.AC.D pdf.zip

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/eproducts/apds/default.asp.

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston Bureau of Air Regulation Division of Air Resource Management (DARM) 850/921-9506

# Livingston, Sylvia

From: Stalls, Denise M. [DStalls@ouc.com]
Sent: Thursday, August 28, 2008 9:14 AM

To: Livingston, Sylvia

Subject: RE: OUC Stanton Energy Center; 0950137-025-AC

#### Received.

**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]

Sent: Wednesday, August 27, 2008 4:58 PM

To: Stalls, Denise M.

Cc: Bradner, James; lori.cunniff@ocfl.net; forney.kathleen@epa.gov; newlandlt@bv.com; Halpin, Mike

Subject: OUC Stanton Energy Center; 0950137-025-AC

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Sylvia Livingston Bureau of Air Regulation Division of Air Resource Management (DARM) 850/921-9506

# Livingston, Sylvia

From:

Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]

Sent:

Wednesday, August 27, 2008 4:58 PM

To:

Livingston, Sylvia

Subject:

Successful Mail Delivery Report

Attachments:

Delivery report; Message Headers





Delivery report.txt (488 B)

Message

Headers.txt(2 KB)
This is the mail system at host mseive01.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<forney.kathleen@epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 48B5BFD5 31687 324089 2 D711A442E5