

Florida Department of Environmental Protection

Memorandum

To: Trina Vielhauer, Bureau of Air Regulation
Through: Jeff Koerner, New Source Review Section *JK*
From: Bobby Bull, New Source Review Section *BB*
Date: June 15, 2010
Subject: Letter of Authorization
Project No. 0950137-034-AC
Orlando Utilities Commission, Stanton Energy Center
Unit 1 Flue Gas Desulfurization System Upgrades

Attached for your review is a letter of authorization for the Orlando Utility Commission's (OUC) Stanton Energy Center, which is located in Orange County at 5100 South Alafaya Trail in Orlando, Florida. Briefly, the letter authorizes OUC upgrades to the Unit 1 Flue Gas Desulfurization mist eliminator vanes and fixed grid wash system. No revision of the original Permit No. 0950137-012-AC is required to implement the proposed changes. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance. I recommend your approval of the attached Letter of Authorization.

Attachments

TLV/jfk/rlb



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

June 15, 2010

Electronically Sent – Received Receipt Requested

Ms. Denise M. Stalls, Vice President of Human and Environmental Resources Department
Orlando Utilities Commission
Reliable Plaza, 100 West Anderson
Orlando, Florida 32802

Re: Project No. 0950137-034-AC
Affected Permit No. 0950137-012-AC
Orlando Utilities Commission (OUC), Stanton Energy Center (SEC)
Flue gas desulfurization system upgrade
Authorization to install mist eliminator vanes and fixed grid wash system

Dear Ms. Stalls:

On April 14, 2010, Orlando Utilities Commission submitted an application to the Department for upgrades to the Stanton Energy Center's unit one flue gas desulfurization system. This application is for a minor source air construction permit for SEC Unit 1. The proposed project would modify the Unit 1 Flue Gas Desulfurization (FGD) system with an upgrade to the mist eliminator vanes and fixed grid wash system. This upgrade is only to the mist eliminator part of the FGD system. There may be a slight improvement in acid gas control, but no significant impact on emissions is expected. OUC is authorized to upgrade the FGD system for Unit 1 under construction permit 0950137-012-AC, which was incorporated into the facility's Title V permit under 0950137-016-AV. The upgrades to the FGD system do not affect the conditions of 0950137-012-AC. The Department authorizes the changes to the mist eliminator vanes and fixed grid wash system.

The Department will consider the above-noted action final unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, of the Florida Statutes (F.S.). Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed 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 (received) in the Department's Office of General Counsel, MS #35, 3900 Commonwealth Boulevard, 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 notice. Petitions filed by any other person must be filed within 14 days of receipt of this proposed action. A petitioner must 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 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 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,

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Letter of Authorization

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 each petitioner received notice of the agency action or proposed action; (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, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; 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 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 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 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.

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by the filing of a Notice of Appeal, under Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/jfk/rlb

Letter of Authorization

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this authorization was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 6/15/10 to the persons listed below.

Ms. Denise M. Stalls, OUC: dstalls@ouc.com

Mr. David Baez, OUC: dbaez@ouc.com

Mr. Scott H. Osbourn, Golder Associates, Inc: sosbourn@golder.com

Ms. Caroline Shine, DEP Central District Office: caroline.shine@dep.state.fl.us

Ms. Victoria Gibson, DEP BAR Reading File: victoria.gibson@dep.state.fl.us

Clerk Stamp

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



(Clerk)

6/15/10

(Date)



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

Orlando Utilities Commission (OUC)
Reliant Plaza
100 West Anderson
Orlando, FL 32802

Stanton Energy Center (SEC)
Facility ID No. 0950137

PROJECT

Project No. 0950137-034-AC
Letter of Authorization
Flue Gas Desulfurization System Upgrades

COUNTY

Orange, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation – New Source Review Section
2600 Blair Stone Road, MS #5505
Tallahassee, FL 32399-2400

June 15, 2010

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

OUC Stanton Energy Center is an existing energy generating facility, which is categorized under Standard Industrial Classification Code No. 4911. The facility is located in Orange County at 5100 South Alafaya Trail in Orlando, Florida. The UTM coordinates of the existing facility are Zone 17, 483.5 km East, and 3150.6 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

This application is for a minor source air construction permit for SEC Unit 1. The proposed project would modify the Unit 1 Flue Gas Desulfurization (FGD) system with an upgrade to the mist eliminator vanes and fixed grid wash system. This upgrade is only to the mist eliminator part of the FGD system. There may be a slight improvement in acid gas control, but no significant impact on emissions is expected.

Processing Schedule

- | | |
|------------|--|
| 04/02/2010 | Received the application for heat input increase for Units 1 and 2 (0950137-032-AC). |
| 04/14/2010 | Received the application for modifications to Unit 1 FGD, major source designation, and pollutant testing requirements. Due to the timing of the receipt of this information, the application was incorporated into permit 0950137-032-AC. |

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- 04/28/2010 Requested additional information.
- 06/10/2010 Conference call with applicant and consultant. Applicant requested separate permitting action for the scrubber modifications. Department agreed due to timing of the project and added Project No. 095137-034-AC; application complete.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_x); sulfur dioxide (SO₂); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS), including H₂S; reduced sulfur compounds, including H₂S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO₂ and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 µg/m³, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The proposed project would modify the Unit 1 Flue Gas Desulfurization (FGD) system with an upgrade to the mist eliminator vanes and fixed grid wash system. This project will not change or increase any process or input limits, and there are no anticipated changes in emissions from Unit 1; therefore, the project is not subject to PSD preconstruction review.

3. DEPARTMENT REVIEW

OUC previously upgraded the FGD system to Unit 1 under construction permit 0950137-012-AC, which was incorporated into the facility's Title V permit under 0950137-016-AV. Below are the conditions from 0950137-012-AC for the scrubber upgrades:

1. Scrubber Upgrades. The permittee is authorized to install a new distribution tray or an additional spray level with increased recycle pump capacity on the Unit 1 WFGD scrubber and to modify the spray nozzles and their arrangement and piping as described in the application. [Applicant Request]
2. Induced Draft Fan. The permittee is authorized to make modification to and increase the speed of the Unit 1 induced draft fan to account for the additional pressure drop caused by the scrubber upgrades described in condition 7 and to resolve vibration problems. [Applicant Request]

The proposed upgrades to the mist eliminator vanes and fixed grid wash system do not affect the conditions of 0950137-012-AC. The Department believes there will be no change in emissions, and the upgrades can be made by OUC without any new or modified permit conditions. The Department will issue a Letter of Authorization to OUC for the FGD system upgrades.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Bobby Bull, P.E., is the project engineer responsible for reviewing the application and drafting the permit documents. Jeff Koerner, P.E., is the Air Permitting Supervisor responsible for reviewing and editing the proposed letter of authorization. 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: Tuesday, June 15, 2010 5:28 PM
To: dstalls@ouc.com
Cc: dbaez@ouc.com; sosbourn@golder.com; Shine, Caroline; Gibson, Victoria; Bull, Robert; Walker, Elizabeth (AIR)
Subject: OUC - Stanton Energy Center; 0950137-034-AC Authorization
Attachments: 0950137-034-AC_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Authorization** for the request referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0950137.034.AC.F_pdf.zip

Owner/Company Name: ORLANDO UTILITIES COMMISSION

Facility Name: STANTON ENERGY CENTER

Project Number: 0950137-034-AC

Permit Status: FINAL

Permit Activity: CONSTRUCTION

Facility County: ORANGE

Processor: Robert Bull

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> .

Project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. 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
sylvia.livingston@dep.state.fl.us

Tracking:

Livingston, Sylvia

From: Baez, David R. [DBaez@ouc.com]
Sent: Wednesday, June 16, 2010 9:24 AM
To: Livingston, Sylvia; Stalls, Denise M.
Subject: RE: OUC - Stanton Energy Center; 0950137-034-AC Authorization

Sylvia,

Received, thank you

David R. Báez
Project Engineer, Environmental Affairs
Orlando Utilities Commission
407-658-6444 x.3691(office)
407-719-6515 (cell)
407-244-8794 (fax)
dbaez@ouc.com

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, June 15, 2010 5:28 PM
To: Stalls, Denise M.
Cc: Baez, David R.; sosbourn@golder.com; Shine, Caroline; Gibson, Victoria; Bull, Robert; Walker, Elizabeth (AIR)
Subject: OUC - Stanton Energy Center; 0950137-034-AC Authorization

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Facility Name: STANTON ENERGY CENTER
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Livingston, Sylvia

From: Stalls, Denise M. [DStalls@ouc.com]
Sent: Wednesday, June 16, 2010 8:47 AM
To: Livingston, Sylvia
Subject: RE: OUC - Stanton Energy Center; 0950137-034-AC Authorization

Received, thank you.

DISCLAIMER

Florida has a very broad public records law. As a result, any written communication created or received by Orlando Utilities Commission, officials and employees will be made available to the public and media, upon request, unless otherwise exempt. Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this office. Instead, contact our office by phone or in writing.

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, June 15, 2010 5:28 PM
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Cc: Baez, David R.; sosbourn@golder.com; Shine, Caroline; Gibson, Victoria; Bull, Robert; Walker, Elizabeth (AIR)
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