



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)

– Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

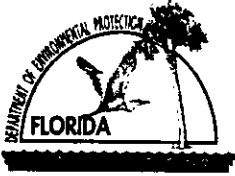
1. Facility Owner/Company Name: Orlando Utilities Commission	
2. Site Name: Stanton Energy Center	
3. Facility Identification Number: 0950137	
4. Facility Location. Street Address or Other Locator: 5100 Alafaya Trail City: Orlando County: Orange Zip Code: 32831	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Denise Stalls	
2. Application Contact Mailing Address. Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802	
3. Application Contact Telephone Numbers... Telephone: (407) 737 - 4236 ext. Fax: (407) 384 - 4020	
4. Application Contact Email Address: <u>dstalls@ouc.com</u>	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Project Number(s):	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

Air construction permit.

Air Operation Permit

Initial Title V air operation permit.

Title V air operation permit revision.

Title V air operation permit renewal.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

Air construction permit and Title V permit revision, incorporating the proposed project.

Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application serves to transmit additional information with respect to the upcoming outage scheduled for Stanton Unit 2 to repair and replace damaged tubing in the unit's primary superheater. Stanton Unit 2 is a nominal 468 MW steam generator with a nominal heat input of 4,286 MMBtu/hr. This unit began commercial operation on March 29, 1996.

A superheater tube change out is planned for the upcoming March 5, 2005 outage. Tubes will be repaired and replaced because metallurgical analyses indicate advanced and irreparable erosion. The new replacement tubes are characterized, as functionally equivalent or a "like-kind" replacement, although the type of alloy proposed to be used in the replacement areas will be slightly different from the existing material. Specifically, the replacement material (SA213 T11) will have a slightly higher chromium content (1.25 percent) than the existing material (SA210 T12 at 1.0 percent chromium). This is the first time that this type of repair and replacement activity has been conducted on this unit. Further, it is not anticipated that this will be a recurring activity, due to the higher corrosion resistance of the replacement material. The project cost is estimated at \$5.0 million and will require about 4 weeks to complete.

Unit 2 is a base load unit and already highly utilized. Any anticipated increase in future utilization, though currently not predicted, would be due to system-wide demand growth and unrelated to the repair and replacement activities planned for the upcoming outage. The comparisons of short-term (heat input rate) and long-term impacts (annual utilization) both before and after the proposed outage activities provide reasonable assurance that no change in the method of operation or in emission impacts is anticipated to occur as a result of the planned outage activities.

Attachment 1 provides a summary of annual utilization over the most recent 5-year period (Table 1), as well as a summary of the most recent 5-year period of annual emissions estimates. *Attachment 2* graphically depicts hourly heat input readings (as recorded by the Acid Rain CEMS) for the most recent available quarter (3rd quarter, 2004). *Attachment 3* provides the scope of work issued for bid for the superheater tube replacement.

Scope of Application

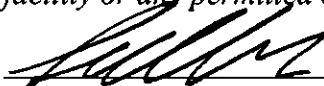
Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
002	Fossil Fuel Steam Generator Unit No. 2	AC	

Application Processing Fee

Check one: Attached - Amount: \$ _____ Not Applicable

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : Frederick F. Haddad, Jr. VP, Power Resource Business Unit
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802
3. Owner/Authorized Representative Telephone Numbers... Telephone: (407) 244 - 8732 ext. Fax: (407) 275 - 4120
4. Owner/Authorized Representative Email Address: <u>fhaddad@ouc.com</u>
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i>  _____ Signature 2/9/05 _____ Date

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”

1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: () - ext. Fax: () -
5. Application Responsible Official Email Address:
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i> _____ Signature _____ Date

Professional Engineer Certification

1. Professional Engineer Name: Scott Osbourn

Registration Number: 57557

2. Professional Engineer Mailing Address...

Organization/Firm: Golder Associates Inc.

Street Address: 5100 West Lemon St., Suite 114

City: Tampa

State: FL

Zip Code: 33609

3. Professional Engineer Telephone Numbers...

Telephone: (813) 287 - 1717 ext. 211 Fax: (813) 287 - 1716

4. Professional Engineer Email Address: sosbourn@golder.com

5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

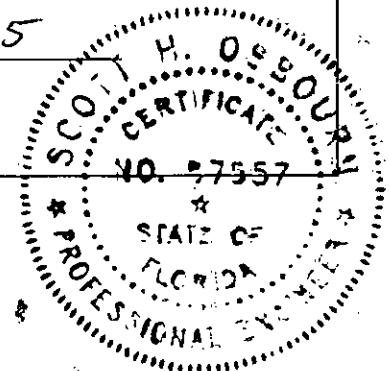


Signature

2/9/05

Date

(seal)



* Attach any exception to certification statement.



ATTACHMENT 1

Annual Utilization

Attachment 1. Data Summary

This attachment is a supplement to the construction permit application for OUC Stanton Unit 2. Table 1 provides annual utilization data (past and future projected). Table 2 provides a summary of the most recent 5-years of reported annual emissions data.

The utilization comparison (Table 1) was made for three parameters that are considered representative of annual operating measurements: 1) heat input in million Btu per year (MMBtu/yr), 2) net generation in MW-hours (net, MW-hrs) and 3) hours of operation per year. These data are summarized below in tabular form.

Table 1. Annual Utilization Summary

Year of Operation*	Heat Input (MMBtu/yr)	Generation (net, MW-hrs)	Hours Operated
2000	32,108,068	3,259,043	8,112
2001	31,854,316	3,247,567	8,036
2002	30,392,586	3,072,127	7,671
2003	28,477,649	2,956,008	7,261
2004	30,203,431	3,062,770	7,728
Highest 2-yr Avg 2000-2001	31,981,192	3,253,305	8,074
2005-2006 (2-yr avg)*	31,139,600	3,160,377	7,887

* Projected based on production cost models that are used to project future requirements

A summary of annual reported emissions for all criteria pollutants is presented below in Table 2. The summary was obtained from AOR data as reported for the most recent 5-year period (1999 through 2003).

Table 2. Annual Emissions Summary

Year of Operation	NOx (TPY)	SO2 (TPY)	CO (TPY)	PM (TPY)	PM10 (TPY)	VOC (TPY)
1999	2,450	2,640	265.4	215.4	134.7	31.9
2000	2,741	3,096	389.9	109.5	69.0	45.0
2001	2,811	3,236	382.6	66.9	42.4	44.4
2002	2,583	2,359	370.8	101.5	63.8	42.8
2003	2,420	2,368	358.5	95.2	64.3	40.8
Highest 2-yr Avg 2000-2001	2,776	3,166	386.3	162.5	101.9	44.7

* Based on AOR data. Highest 2-yr avg for PM/PM₁₀ was 1999-2000.

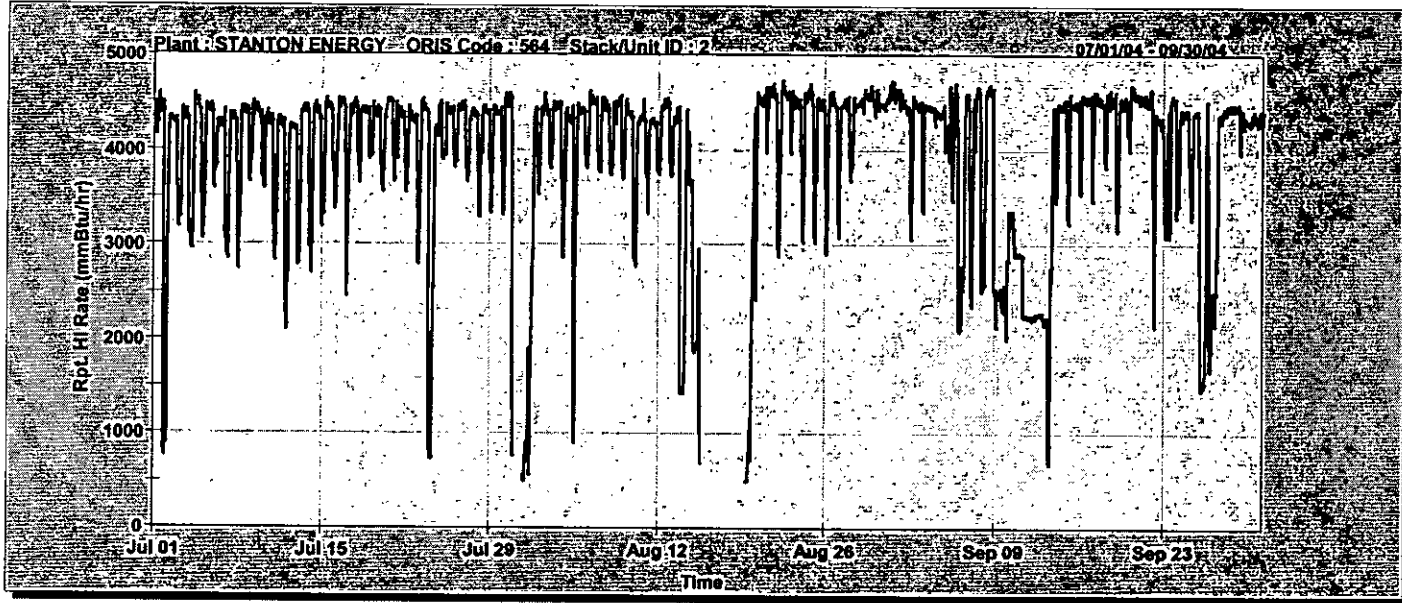
ATTACHMENT 2

Hourly Heat Input

No Filter

Rpt. HI Rate (mmBtu/hr)

2/4/2005



ATTACHMENT 3

Superheater Tube Replacement Scope of Work

**ORLANDO UTILITIES COMMISSION
ORLANDO, FLORIDA**

Request for Proposals
For

**SEC Unit 2 Boiler
Primary Superheat Tube Banks Replacement**

Bid No. 1756 OQ

COMMISSIONERS

TOMMY BOROUGHS	President
LONNIE C. BELL	First Vice President
KATIE PORTA	Second Vice President
TICO PEREZ	Immediate Past President
BUDDY DYER	Mayor
KENNETH P. KSIONEK	Interim General Manager & Chief Executive Officer

SPECIFICATIONS

SCOPE OF WORK

The objective of this proposal is to solicit competitive proposals from Contractors who can provide design and erection of a new Primary Superheat Tube Banks for Stanton Energy Center Unit No. 2 B&W Radiant Reheat Boiler.

- A. Inspect Boiler with "Owner approved" Boiler Inspector. This includes penthouse, windboxes, furnace, back-end of boiler to air preheater, bottom ash pit, pulverizers and hot air ducts. Inspections shall be performed at the start of the outage. Inspection shall include two inspectors for seven ten-hour (or longer) days. Report to Owner shall be in an electronic format and include pictures of findings. Formal report shall be provided to Owner within two weeks from end of inspection. Daily punch list shall be provided to Owner. Contractor shall provide experienced supervisory personnel to follow boiler inspectors to help with inspections, note location of findings and discuss corrective actions that will be need to take place.
- B. Design and Fabricate Primary Superheat Tube Banks.
1. Design a replacement Primary Superheat Tube Banks using SA213T11. Performance guarantees must be provided with design. Source of material and quality control methods shall be provided at bid opening. Tube material tests shall be provided (in English) to OUC Engineering for review and approval prior to shipment.
 2. Fabricate to equivalent dimensions in Stanton Energy Center Unit 2. Weld joints shall be in full compliance with ASME codes. Both sides of weld joints should have no more than 1/16" difference between the ID's and OD's of the adjacent materials.
 3. Meet or exceed existing design criteria, tubes shall not rub the wall tubes during operation and balanced steam flows between circuits are required.
 4. Tube Alignment brackets, spacer bars/clips (or equiv), and support attachments shall be included.
 5. Contractor is responsible for all dimensions associated with this proposal.
- C. Install Primary Superheat Banks.
1. All miscellaneous materials shall be included as required for proper installation
 2. Provide OUC all weld procedures to be used.
 3. Contractor/Subcontractor must hold "R" stamp for boiler work and follow all boiler codes.
 4. All welds will be radiologically examined for quality control. Contractor shall provide a AWS Certified Welding Inspector. Contractor shall submit qualifications of the inspectors to engineering for review. Owner may request NDE testing to be repeated when a defect is suspected, expense of retest is responsibility of contractor. Copies of the inspection, non-destructive testing, stress relieving and material certifications shall be provided to Owner.
 5. All OUC property and equipment that is removed or moved to allow for installation will be put back in original condition, which includes lagging, sootblowers and painting if needed.

D. Scaffold, Sandblast and Inspect Secondary Superheat Outlet Tube Bank.

Scaffold around Secondary Superheat Outlet Tube Bank for access to all of tube bank. Sandblast to white metal, and perform NOTIS (B&W Patent) or equivalent life expectancy testing. If equivalent is used, specifications shall be given to engineer prior to awarding of bid.

E. Install Tube Shields and Miscellaneous Repairs.

Install 4000 18" straight tube shields in the Primary Superheat Section, Secondary Superheat and Reheat Section (back end) using OUC supplied tube shields. Include 2000 hours of punch list repairs from the boiler inspection. Rate sheet will need to be provided showing cost breakdown.

F. Material Removal

1. All removed metal material shall be cut up and placed inside metal dumpster supplied by OUC. Contractor's request for placement shall be given 2 weeks in advance. OUC will supply barrels for non-metal material and dispose of it on a daily basis at designated locations.
2. All loose material in boiler shall be cleaned out, this includes: dust, welding rods, broken glass, loose insulation etc....
3. All ash on tubes shall be pressure washed clean prior to removal.

G. Owner-Contractor Interface.

The Contractor shall provide all equipment, material and labor to perform the work unless otherwise specified. Tool loans are prohibited.

1. High voltage electrical hookup requirements shall be made at Bid Opening.
2. Contractor shall bring their own lighting needs and GFI's for 110 volt outlets.
3. Contractor shall give Owner 24 hour advance notice for high voltage hook-up/removal or operational support (includes Red-Tag request).
4. Contractor may use house air service, which has "THOR" fittings with locking rings. Contractor shall furnish adapters if needed. (not for sandblasting)
5. Hoist located by unit 1 elevator may be used by contractor, Owner has precedence, if needed. Owner is not liable for condition of hoist, Contractor should inspect it before use or provide own equipment. Owner is not liable for elevator operation.
6. Contractor shall pressure wash ash off of boiler tubes before removing tube banks outside of boiler.

MISCELLANEOUS INFORMATION

- A. Boiler is classified as "confined space" Contractor shall abide by the rules for confined space entry.
- B. Detailed Schedule shall be provided with the proposal. Schedule will show details from start to finish with dates of the items listed in specification.
- C. Work shall begin when Owner gives notice to contractor.
- D. Boiler will be available in March of 2005 for four (4) weeks. OUC will give a schedule four (4) weeks prior to outage.