

Orlando Utilities Commission
500 South Orange Avenue
P.O. Box 3193
Orlando, Florida 32802
Phone: 407.423.9100
Administrative Fax: 407.236.9616
Purchasing Fax: 407.384.4141
Website: www.ouc.com



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SEP 14 2005

The Reliable One®

BUREAU OF AIR REGULATION



COPY

September 12, 2005

Mr. Scott Sheplak
South Permitting Section
DARM/BAR
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Attention: Mr. Sheplak

**RE: OUC STANTON ENERGY CENTER, UNIT 1
PLANNED OUTAGE- BURNER REPLACEMENTS**

Dear Mr. Sheplak:

This letter serves to transmit additional information with respect to the upcoming outage scheduled for Stanton Unit 1 and the necessity of obtaining a construction permit for certain planned activities. Specifically, the outage is scheduled to begin on October 3, 2005 and the activity of interest is the repair and replacement of worn burners.

Stanton Unit 1 is a nominal 468 MW steam generator with a nominal heat input of 4,286 MMBtu/hr. This unit is fired primarily on bituminous coal. The unit is also equipped to fire No. 6 fuel oil, pipeline quality natural gas, on-spec used oil and landfill gas. Unit 1 is categorized as a dry bottom wall-fired unit consisting of a Babcock and Wilcox boiler/steam generator, Model RB 621. Best Available Control Technology (BACT) has been applied for all pollutants. Particulate emissions are controlled by a dry electrostatic precipitator, SO₂ emissions are controlled by a flue gas desulfurization system, and NO_x emissions are minimized by good combustion practices. This unit began commercial operation on May 12, 1987.

The Stanton Energy Center Steam Generators utilize pulverized coal in conjunction with heated air for furnace ignition using the existing burner system. The existing burners have two different air control registers that circulate the air around the pulverized coal in two air zones. The zones are adjusted for flame stabilization and proper flame circulation. By creating a two-zone burner, the combustion has a larger flame volume, resulting in lower flame temperatures and reduced NO_x formation. Maintaining burners are necessary for proper combustion, low NO_x emissions, and flame stabilization at low load conditions.

Due to age and location on the Unit 1 steam generator, six burners have experienced heat and erosion damage beyond repair and improper flame characteristics have resulted. The steam generator has thirty burners; the damaged ones are located in the upper portion of the furnace at one level. This particular level is typically not in use, which made the burners more susceptible to radiant heat damage. Cooling air is provided but, due to time, low load operations and the material grade of the burners; warping of the burner air registers and seal area is prevalent.

A burner replacement is planned for the upcoming outage, which is scheduled to commence on October 3, 2005 and conclude on November 30, 2005. As stated previously, six out of thirty burners in the upper portion of the furnace will be replaced. The new replacement burners are characterized as functionally equivalent or a "like-kind" replacement, with upgraded material and improved mechanical actuator controls. The project cost is estimated at \$204,000.

The first issue is whether the project is exempt in accordance with the Department's definition of a modification under existing rules (Florida Section 62-210, F.A.C.). The project is arguably a physical change and thus is eligible for consideration as a modification. However, it should be considered whether the project is exempt from the definition of modification as provided in Section 62-210.200(169)(a), F.A.C. This provision states:

A physical change or change in method of operation shall not include: Routine maintenance, repair, or replacement of component parts of an emission unit. (Emphasis added.)

This exemption is dependent on the definition of "routine". Two recent court cases, of some relevance to these planned activities, have resulted in differing interpretations with respect to the meaning of routine. The *Ohio Edison* ruling (August 7, 2003) maintained that the meaning of "routine" was with respect to activities for a particular emission unit. The *Duke Power* ruling (August 26, 2003) was that "routine" was relative to an entire source category (i.e., is the activity routine in the industry). Burner repairs and replacements are typically required during the life of an electric utility steam generating unit (EUSGU) and such repairs and replacements are routine within the industry.

Notwithstanding whether the proposed activity is routine repair and replacement, a modification can only occur if it would result in an increase in actual emissions for the facility. In making a comparison of whether an increase in actual emissions has occurred, the utilization before and after the change is the most important indicator, *especially if the change did not by itself affect the emission rate of the unit*. The following paragraphs provide additional information with respect to both short-term impacts (i.e., affect on heat input rate) and long-term impacts (i.e., annual utilization).

Short-term impacts can be assessed in terms of the unit's fuel flow or heat input, expressed as million Btu per hour (MMBtu/hr). This parameter, combined with pollutant emission rates in lb/MMBtu, yields a pollutant mass emission rate of pounds per hour (lb/hr). This analysis is based on the assumption that, as long as the short-term heat input is not affected by the proposed activity, then short-term pollutant emission rates are similarly unaffected. This is because comparison of actual emissions are confounded by several factors, including the availability of continuous emission monitoring data, data reporting procedures, fuel quality and sampling variability. Taken together, comparisons of emissions would have to account for a variety of factors in order to draw conclusions with regard to whether or not emissions have increased as a result of a physical or operational change. The short-term measure of heat input rate (MMBtu/hr) is currently provided as a nominal rating in the Unit 1 permit of 4,286 MMBtu/hr. While Acid Rain monitoring data are not used for compliance with the permitted heat input rating, as it tends to over-estimate heat input, this data provides a good indicator of unit capacity. Historical data was obtained for the most recently available operating quarter (1st Quarter, 2005), plotted and compared to the unit's maximum rated capacity (Permit Application, Attachment 2). It is clear that unit operation has not degraded with respect to maximum

achievable capacity and that activities planned for the upcoming outage are not for the purpose of restoring or otherwise impacting the short-term heat input rate.

Long-term impacts, or annual utilization, can be measured in several ways. Stanton Unit 1 is characterized as a base load unit, which means that it is designed to be operated at a high capacity factor. Operation is based on system wide electricity demand, which can vary annually due to weather conditions and the availability of other units. This would be evidenced by utilization of the unit for the most recent 5-year period (2000 to 2004). To evaluate whether an increase in utilization is anticipated to occur as a result of the planned outage activity, the highest 2-year average of historical use (2000-2001) is compared to projected future utilization for the 2-year period following the outage. OUC obtains future utilization estimates from the production cost models that are used to project fuel requirements and, for purposes of this assessment, the projected utilization is expected to be equivalent to the highest year out of the last 5 year period.

A comparison of average utilization rates before and after the planned outage shows that no increase is projected to occur. The utilization comparison 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.

Year of Operation	Heat Input (MMBtu/yr)	Generation (net, MW-hrs)	Hours Operated
2000	33,000,823	3,189,287	8,025
2001	33,180,949	3,147,090	8,080
2002	31,094,095	2,997,911	7,767
2003	31,842,481	3,098,337	7,986
2004	28,504,372	2,823,306	7,471
<i>Highest 2-yr Avg. 2000-2001</i>	33,090,886	3,168,189	8,053
2005-2006*	33,180,949	3,189,287	8,080

* Equal to the highest single year of the last 5 year period.

As stated, Unit 1 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.

OUC believes, based on the above project summary, that no construction permit is necessary for the planned outage activity. In fact, a meeting was held at the Department's offices on August 18, 2005 among Michael Cooke and Trina Vielhauer of the Department, Louis Brown of OUC and Scott Osbourn of Golder Associates. Specifically, the meeting's purpose was to discuss the routine

Mr. Sheplak
September 12, 2005
Page 4

maintenance, repair and replacement (RMRR) activities frequently performed by utilities as part of their ongoing planned outages and the decision making process that the Department uses to guide whether permitting action is required. Mr. Cooke's response was that the Department would form an internal work group to address this issue and provide specific guidance for circumstances such as this. In the meantime, due to current regulatory uncertainty with respect to proper treatment of equipment repair and replacement projects, as well as discussions with the Department, this letter serves to transmit an application for a construction permit for the described activities. The application includes the following three attachments: 1) Attachment 1- summary tables of annual utilization (Table 1) and annual emissions (Table 2), 2) Attachment 2- graphical depiction of hourly heat input and 3) Attachment 3- the scope of work issued for bid for the activities to be performed.

OUC appreciates your consideration of the above and requests your timely processing of the subject permit. If you should have any questions, please do not hesitate to contact either Scott Osbourn at (813) 287-1717 or me at (407) 737-4236.

Sincerely,

Louis M. Brown

for Denise M. Stalls
Director, Environmental Division

Attachments

Cc: Scott Osbourn, P.E., Golder Associates Inc.
Leonard T. Kozlov, P.E., DEP Central District



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

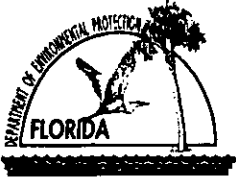
1. Facility Owner/Company Name: Orlando Utilities Commission	
2. Site Name: Stanton Energy Center	
3. Facility Identification Number: 0950137	
4. Facility Location. Street Address or Other Locator: 5100 Alafaya Trail City: Orlando County: Orange Zip Code: 32831	
5. Relocatable Facility? <input type="checkbox"/> 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: dstalls@ouc.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	9-14-05
2. Project Number(s):	0950137-009-AC
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 1 to repair and replace damaged coal burners in Unit No. 1. The outage is scheduled to commence on October 3, 2005. The unit consists of a nominal 468 MW steam generator with a nominal heat input of 4,286 MMBtu/hr. This unit began commercial operation on May 12, 1987.

The Stanton Energy Center Steam Generators utilize pulverized coal in conjunction with heated air for furnace ignition using the existing burner system. The existing burners have two different air control registers that circulate the air around the pulverized coal in two air zones. The zones are adjusted for flame stabilization and proper flame circulation. By creating a two-zone burner, the combustion has a larger flame volume, resulting in lower flame temperatures and reduced NO_x formation. Maintaining burners are necessary for proper combustion, low NO_x emissions, and flame stabilization at low load conditions.

Due to age and location on Unit 1 steam generator, six burners have experienced heat and erosion damage beyond repair and improper flame characteristics have resulted. The steam generator has thirty burners; the damaged ones are located in the upper portion of the furnace at one level. This particular level is typically not in use, which made the burners more susceptible to radiant heat damage. Cooling air is provided but, due to time, low load operations and the material grade of the burners; warping of the burner air registers and seal area is prevalent.

A burner replacement is planned for the upcoming outage. As stated previously, six out of thirty burners in the upper portion of the furnace will be replaced. The new replacement burners are characterized as functionally equivalent or a "like-kind" replacement, with upgraded material and improved mechanical actuator controls. The project cost is estimated at \$204,000.

Unit 1 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 burner replacement activities planned for this project. The comparisons of short-term (heat input rate) and long-term impacts (annual utilization) both before and after the proposed burner replacement 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 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 (1st quarter, 2005). *Attachment 3* provides the vendor quotation for the burner replacement.

Scope of Application

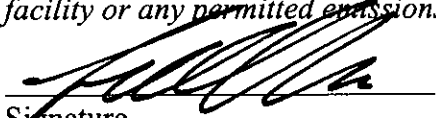
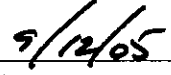
Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
002	Fossil Fuel Steam Generator Unit No. 1	AC	

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.

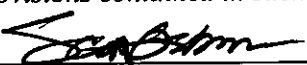
1. Owner/Authorized Representative Name : Frederick F. Haddad VP, Power Resources Business Unit
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802
3. Owner/Authorized Representative 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  Date

Application Responsible Official Certification

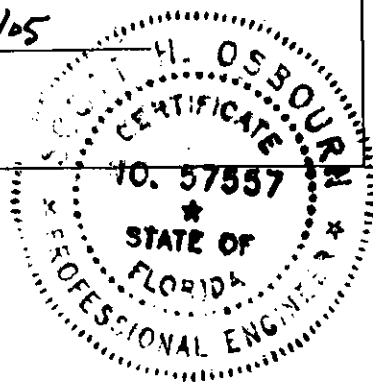
Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

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: <u>sosbourn@golder.com</u>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , 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.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , 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 <input type="checkbox"/> , 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.</i> <i>(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 <input type="checkbox"/> , 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.</i> Signature: <u></u> Date: <u>9/12/05</u> (seal)

* Attach any exception to certification statement.



ATTACHMENT 1

ANNUAL UTILIZATION AND EMISSIONS

Attachment 1. Data Summary

This attachment is a supplement to the construction permit application for OUC Stanton Unit 1. 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	33,000,823	3,189,287	8,025
2001	33,180,949	3,147,090	8,080
2002	31,094,095	2,997,911	7,767
2003	31,842,481	3,098,337	7,986
2004	28,504,372	2,823,306	7,471
<i>Highest 2-yr Avg. 2000-2001</i>	33,090,886	3,168,189	8,053
2005-2006*	33,180,949	3,189,287	8,080

* Equal to the highest single year of the last 5 year period.

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 (2000 through 2004).

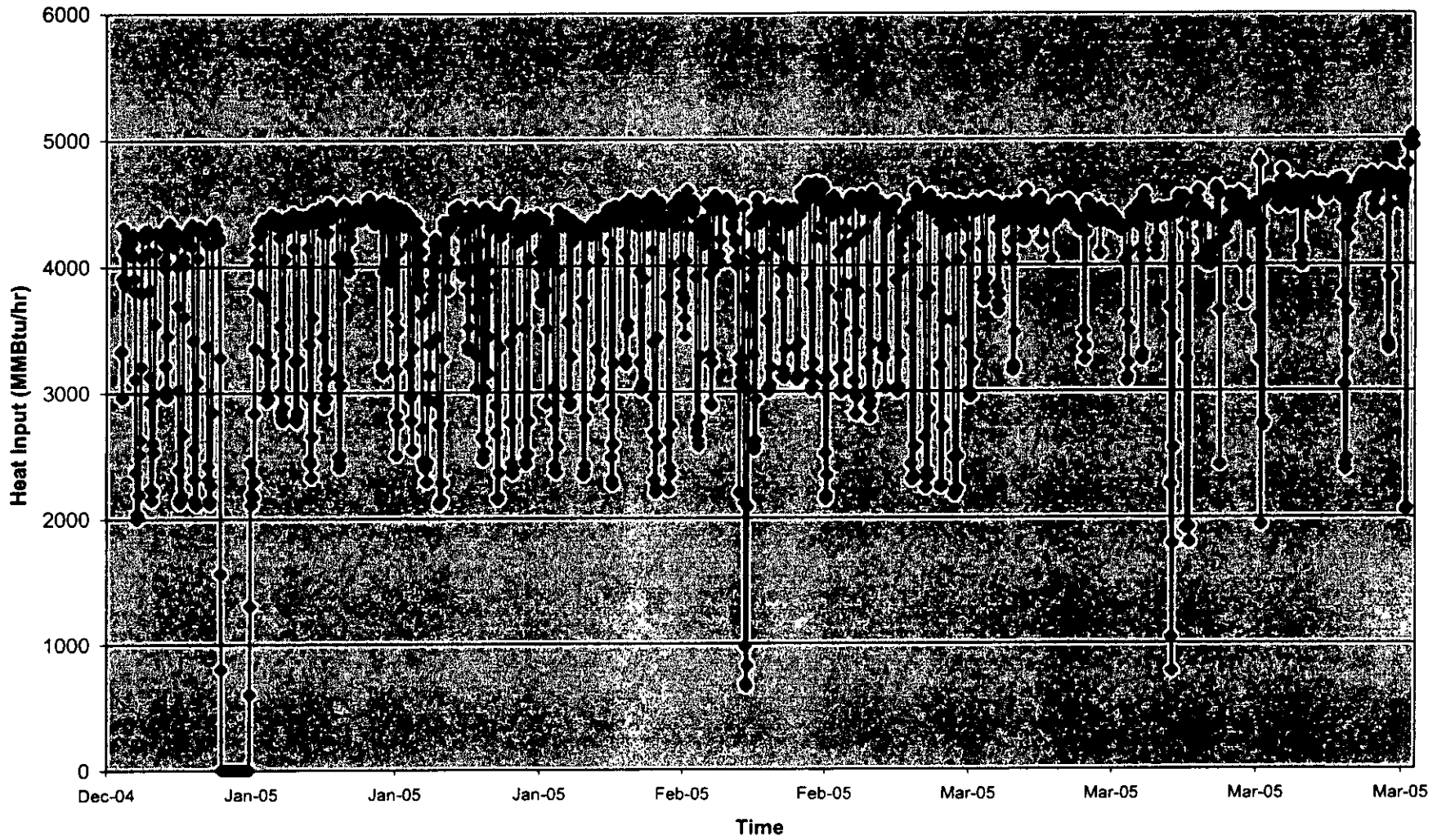
Table 2. Annual Emissions Summary

Year of Operation	NOx (TPY)	SO2 (TPY)	CO (TPY)	PM (TPY)	PM10 (TPY)	VOC (TPY)
2000	6,977	6,577	395	593	30.0	44.5
2001	7,529	6,851	388	135	30.0	43.5
2002	6,246	5,355	413	43.2	37.2	44.8
2003	6,155	5,374	413	47.4	30.3	45.0
2004	5,968	4,274	395	39.5	39.5	43.8
<i>Highest 2-yr Average</i>	7,253	6,714	413	364	34.9	44.9

ATTACHMENT 2

UNIT NO. 1 HEAT INPUT

Stanton Energy Center Unit No. 1 Heat Input



ATTACHMENT 3

VENDOR QUOTATION

Date		Originator	J.D. Czarniecki
Capital Job #	C	Originator Work Order #	W

Classification Of Expenditure:		Project Start Date	October 3,2005
<input checked="" type="checkbox"/> Replacement		Project Completion Date	November 30,2005
<input type="checkbox"/> Expansion (additional capacity of existing plant or equipment)		Is Commission Approval Required?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Growth (new plant or equipment)		Fiscal Year Breakdown	2006
<input type="checkbox"/> Other			

Brief Description & Justification
 Maintaining Stanton Energy Center Unit 1 coal burners are necessary for proper combustion, low Nox emissions and flame stabilization at low load operation. Due to age, location, material grade and low load operation, six burners are damaged beyond repair. Replacing six out of thirty burners with equivalent replacements is necessary. Installation will part of boiler outage work-scope.

ORIGINAL COST ESTIMATE			
	Direct	Overhead	Total
Labor Hours _____			
Labor Cost (Include Labor O/H)	\$0.00	\$0.00	\$0.00
Material Cost (Include Material & Truck Stock O/H)	\$0.00	\$0.00	\$203,340
Other Cost (Include Administration O/H)	\$0.00	\$0.00	\$0.00
Total Original Request _____ →			\$203,340.00

REVISED COST ESTIMATE			
Description of Change Request			
	Direct	Overhead	Total
Labor Hours _____			
Labor Cost (Include Labor O/H)	\$0.00	\$0.00	\$0.00
Material Cost (Include Material & Truck Stock O/H)	\$0.00	\$0.00	\$0.00
Other Cost (Include Administration O/H)	\$0.00	\$0.00	\$0.00
Change Request Total _____ →			\$0.00
REVISED TOTAL PROJECT AMOUNT _____ →			\$0.00

APPROVALS				
Approval Description	Originating Director	Vice President	General Manager	Commission
Original Estimate				
Date				
Change Estimate				
Date				



Donora Industrial Park, 95 Washington Street
 P.O. Box 211, Donora, Pennsylvania 15033

724.379.4477
 1.800.676.7116
 Fax 724.379.4408
 www.piburners.com

QUOTATION

November 18, 2004

P&I Q04-0993

Customer: Orlando Utilities Commission Phone: 407-658-6444
 Plant: Stanton Energy Center Fax: 407-244-8794
 Code: ORLSTA Email: jczarniecki@ouc.com

Attention: Jim Czarniecki Subject: Unit 1 – Replacement DRB Burner

Power & Industrial Services is pleased to present the following quotation:

Item	Description	Qty	Unit Price
1	Replacement DRB Burner Cell Assembly without Nozzle Assembly – for Unit No. 1: <ul style="list-style-type: none"> • Per drawing 294355 E Rev 5 • Use of Push / Pull mechanisms for the Spin Vanes instead of the existing gear arrangement...to improve reliability of movement • Use of 309 SS for Throat Sleeve (2-5665-SA1) as previously supplied...to be part of Burner Cell Assembly • Use of 309 SS for Outer Register Front, Rear Plates and Vanes • P&I style center linkage for Outer Register ...to improve reliability of movement of vanes • Use of 309 SS for Inner Air Zone Sleeve and Spin Vanes • Includes Observation Port and Outer Register Handle & Quadrant • Includes manual drives for the Inner Air Zone Disc and Spin Vanes • Slip Seal Packing to ship loose for field installation • Customer to reuse existing Flame Scanners and Igniters • Customer to specify CW or CCW arrangement when ordering 	1	\$ 29,875.00 each
2	Nozzle Assembly- P&I P/N 2-5757-A <ul style="list-style-type: none"> • 17.25" ID x 116" OAL • 36" Long PI2000 Heat and Abrasion Resistant Tip • Mounting holes for Coal Deflector • Seal Ring tac welded in place for shipping • 36" Long area at Nozzle inlet to have Thermal Spray coating • Does not include Coal Deflector or Conical Diffuser • Same as previously supplied 	1	\$ 2,185.00 each

3	Throat Sleeve Casing Assembly- P&I P/N 2-5665-SA2 <ul style="list-style-type: none"> • Use of 309 SS • Same as previously supplied 	1	\$ 895.00 each
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Notes:

Due to the unstable price of nickel alloy, extended firm pricing of high grade nickel based heat resistant alloys can no longer be offered. Until prices become more stable we recommend that your purchase be made within 15 days of our quotation date.

Please call if you have any questions or need additional information. Thank you for your interest in Power & Industrial Services.

Delivery: **10 to 12 Weeks ARO**
 FOB: **SPFC – Shipping Point Freight Collect**
 Terms: **Net 30 Days**

Sincerely Yours.



Rick Vano

RV/mlr