

Appendix A: Technical Specification B51 Exhaust Silencer Replacement

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1.0 Location of Property

JEA Brandy Branch Generating Station is located at 15701 West Beaver Street, Jacksonville, Florida 32234.

2.0 Scope of Work

2.1. This Specification covers the performance, engineering, design, fabrication, and installation of one (1) new exhaust silencer located in the horizontal ducting for one gas turbine unit as described herein. This specification also covers demolition and removal of the existing exhaust silencer. The contractor is to furnish labor, supervision, material, cranes, and other equipment to engineer, design, fabricate, deliver to the site, unload, and install one new replacement exhaust silencer and related work for the General Electric MS7000FA gas turbine.

2.1.1. The contractor shall remove and dispose of the existing exhaust silencer including the silencer baffles. The Contractor shall provide all material and labor for installation of the new exhaust silencer including baffles. The new silencers shall be a state of the art cold shell design. The exterior shell shall be carbon steel, and all interior liner surfaces exposed to exhaust gases shall be a minimum of 409 stainless steel. The silencer panel frame and perforated sheets shall be constructed of 11CrCb material.

2.1.2. The contractor shall take every precaution to not damage the existing structural steel support system. It is intended that this support system will be reused and that the new silencer will fit and connect to the existing structure as they now exist. The Contractor shall take precautions to support and keep stable the support structure during demolition and installation.

2.1.3 The contractor shall remove the transition ductwork between the exhaust silencer and stack in order to install the new exhaust silencer. The Contractor shall replace, with new, the 6" Fabric joint and insulation pillow between the transition duct and ~~stack~~ after reinstallation of the transition ductwork. EJCON Corp. fabricated the existing 6" fabric expansion joint. Refer to Paragraph 9.9 for expansion joint specification.

3.0 Codes and Standards

The following codes and standards, as amended to date, are applicable under this contract:

Codes, Rules and Regulations of the State of Florida

Occupational Safety and Health (OSHA)

29 CFR Parts 1926.1101, 1926.62 and 1926.850 through 1926.859

American Society for Testing and Materials (ASTM)

A-36 Structural Steel

A-240 Stainless and Heat-Resisting Chromium Steel Plates, Sheet and Strip

A-285 Pressure Vessel Plates, Carbon Steel, Low and Intermediate Tensile Strength

A-325 High-Strength Bolts for Structural Steel Joints

Steel Structures Painting Council (SSPC) Surface Preparation as Specified

American Welding Society (AWS) Structural Welding Code, Steel (AWS D1.1)

American Welding Society (AWS) Structural Welding Code
Sheet Metal (AWS D1.3)

American Institute of Steel Construction (AISC)
Manual of Steel Construction, 13th Edition

American Society of Civil Engineers (ASCE)
ASCE Standard ANSI/ASCE 7-2010

American National Standard
ANSI B133.8 “Gas Turbine Installation Sound Emissions”

4.0 Existing Exhaust Silencer Description

4.1. The existing exhaust silencer for the GE Model 7FA (SN 297378) Gas Turbine Generator is located in the horizontal ducting and is a cold shell design. There has been deterioration to the baffles, internal liner and silencer duct due to thermal stresses and corrosion from exhaust emissions. The exhaust silencer system is acoustically designed for sound attenuation.

4.2. The general dimensions of the exhaust silencer are shown on the reference drawings by C&W Fabricators. The replacement exhaust silencers shall be designed and fabricated to match the overall dimensions of existing components to insure a proper fit. It is also required that new silencers utilize the existing structural steel support structure. The shell is constructed of ASTM – A36 steel. The shell plate is generally a minimum of 0.25” inch thick steel. All interior liner materials, exposed to hot gases, are 409 stainless steel. The insulation panels are approximately 6 inches thick.

4.3. The exhaust gas flow for the GE Frame 7FA gas turbine is 3542 kpph with an average exhaust temperature of 1120 degrees F while operating on natural gas. The design internal temperature is 1250 F. The existing silencer is designed for a pressure drop of 2.5 inches of water. The replacement silencer pressure drop shall not exceed the 2.5 inches of water of the original system.

5.0 Demolition and Removal

5.1 Extreme care must be taken so that no damage is done to the JEA's station facilities that will remain in operation during the demolition work. It is emphasized that facilities located adjacent to and below grade in the working area are very essential elements of the plant. All such adjacent facilities must be kept guaranteed safe during all demolition and installation work. When possible, these facilities will be de-energized by JEA personnel. JEA will provide a mark-out of these facilities.

5.2 The Contractor shall erect and properly maintain at all times such danger signs, barricades, lights and other safeguards as may be required for safe working conditions.

5.3 All materials from the demolition become the property of the Contractor and shall be removed promptly from the site. Removal of debris from the site shall be done frequently so as to avoid any collection of debris.

5.4 The Contractor is advised that some of the material to be disposed of will contain various insulation materials such as Birfelt, fiberglass, mineral wool, and fiberglass cloth.

5.5 The Contractor shall submit along with the bid proposal, the names of the sub-contractor(s), if any, who may be used for demolition, disposal, and installation. The Contractor shall also include the proposed disposal location for the material removed. The Contractor shall obtain the required permits necessary for the disposal of the removed material. The Contractor shall provide copies of disposal records/logs and certificate of recycle.

5.6 The Contractor shall take every precaution to not damage the existing Drain line from the bottom of the existing Stack.

6.0 Hazardous Material Removal

Potential Asbestos Removal

6.1 It is not expected that the Contractor will encounter any asbestos containing material in the demolition of the existing silencer systems. There are no gaskets between the stack and duct sections. The gaskets on the man way hatches are fiberglass. If the Contractor suspects that any components of the silencer systems contain asbestos, the Contractor shall notify the JEA Project Manager. The Contractor is advised that any material suspected of containing asbestos will have to be treated as asbestos containing material until cleared by testing. The contractor shall observe all safety standards and procedures as required to handle potential asbestos in accordance with JEA Safety Procedures. **JEA shall arrange and be responsible for testing any suspected asbestos. JEA shall reimburse the Contractor additional costs associated with the finding of components containing or suspected of containing asbestos. The Contractor shall not include in its bid contingency funds for potential asbestos related work.**

Painted

Surfaces

6.2 The Contractor is advised that the existing exhaust silencer system is **not** coated with a lead containing paint system.

7.0 Replacement Exhaust Silencer

7.1 The Contractor shall be fully responsible for the complete design and replacement of the existing deteriorated exhaust silencer and baffles including verification of interface field dimensions, analysis, aerodynamic and structural design. The Contractor shall design the replacement exhaust silencer to fit on the existing supporting structural steel. The Contractor shall inspect the condition of the existing structural steel support frame for the replacement exhaust silencer.

7.2 The Contractor shall engineer, design, fabricate, deliver to the site and install a new replacement exhaust silencer including baffles. The exhaust silencer system shall be a cold shell design internally lined and insulated ducting. The average external shell temperature shall not exceed 160 degrees F. Hot spots up to 10 degrees above the average are acceptable. The silencer shall operate reliably in an ambient temperature range of minus 10 degrees F to 110 degrees F. The exterior components shall be fabricated from ASTM A36 steel at a minimum. All interior components in contact with exhaust gases shall be at a minimum Type 409 stainless steel. The silencer panel frame and perforated sheets shall be constructed of 11CrCb material. **All joints and stiffeners shall be seal welded all around.**

7.3 The exhaust silencer shall be designed in accordance with the latest "state of the art" design for the sound attenuation replicating the existing number and general dimensions of the existing baffles. The primary design requirements shall be to attain the sound attenuation criteria outlined herein, to size the silencer to insure a proper installation on the existing support structure, minimize back pressure, and obtain a true cold shell design. The internal geometry and dimensions of the gas path shall be substantially the same as the existing so as not to change the flow patterns.

7.4 The exhaust silencer interior surfaces, hardware and components which come in contact with exhaust gases shall be per section 9.0. All nuts used in interior surfaces shall be prevented from running off the bolts by tack welding the nuts to the bolts.

7.5 The exhaust stack shall be a cold shell design. The cold shell design shall incorporate 6" thick insulation between the interior and exterior surfaces. The insulation shall be 8# /cu. Ft. ceramic fiber rated to a minimum of 1700 degrees F. continuous use. The insulation shall be compressed 15-20 percent. No voids are allowed within the wall construction. The insulation shall be designed so as not to droop in the vertical panels and shall be supported by the use of 1/2" dia. SS liner studs spaced approximately 12" - 15" apart.

7.6 The insulation to be provided for the baffle fill shall be 155 kg/m³ cotton stitched basalt wool compressed to a final density of 124 to 130 kg/m³. The insulation in the baffles shall be wrapped and protected with one layer of 0.25" thick heat resistant fiberglass needle mat and one layer of 300 series stainless steel wire mesh. The wire mesh shall be solidly tack welded to the inside of the perforated steel. The insulation shall be compressed 12 to 20 percent and shall be supported every 24" in the horizontal to minimize settling affect. The baffle construction shall be

such that no edge of the perforated sheet is exposed to the exhaust flow. Noses and tail section are to be used as required to minimize pressure loss.

7.7 The Contractor shall paint the exterior sides of the exhaust silencers and select areas of the interior side of the exterior shell. The Contractor shall provide the coatings as per section 11.0

7.8 The exhaust stack shall be designed for the: dead loads, wind load, and seismic loads specified in ANSI/ASCE 7-2010. The structure shall be considered a Risk Category IV structure. The soil Site Class is "D". The wind speed is 130 MPH and the Exposure is "D". The exhaust silencers shall also be designed for dynamic operating loads imposed from the units. The shell shall be designed with sufficient stiffness for structural loads and to minimize noise transmission.

7.9 Loading to be included in the design analysis:

Dead Load	Equipment Load	
Live Load	100 lb. /sq. ft. platforms	
		30 lb. /sq. ft. duct roof
		250 lb. ladders
Duct Pressure	+40 in WG	
Normal Pressure		+10 in WG
Normal Internal Temp		1120 F
Design Internal Temp		1250 F

7.10 Lifting Lugs shall be provided with each major component for ease of lifting, handling, and erection.

8.0 Sound Attenuation Criteria

8.1 At any load at or below the peak load curve and any operating condition, the gas turbine silencer shall reduce the gas turbine exhaust noise to an overall noise level of 65 dBA and 75 dB(C) at a distance of 400 feet from the stack exit while the near acoustic guarantee is 85 dBA at 3 feet from duct and 5 feet above grade. The supplier shall provide detailed acoustic calculations with their proposal noting compliance.

8.2 Measurements and data reporting shall be in accordance with ANSI B133.8 "Gas Turbine Installation Sound Emissions".

8.3 Contractor shall provide sound attenuation testing, to be witnessed by JEA, that assures the new silencer meets the attenuation requirements.

9.0 Material and Fabrication

9.1 The Contractor is responsible for the design and fabrication of the exhaust silencer system. Structural components of the design shall be in accordance with the applicable AISC, ASTM and related codes.

9.2 The following minimum material requirements shall be adhered to in the design and fabrication of exhaust silencer system:

- A. Exhaust silencer shell plate shall be ASTM A36, 3/8" thickness.
- B. Internal Liner shall be ASTM A-240, Type 409 stainless steel sheets, minimum 11 gage.
- C. Silencer Panel Framing shall be 12 gage minimum 11CrCb material.
- D. Silencer Panel perforated sheets shall be minimum 11 gage 11CrCb material.

9.3 Interior hardware, as required, shall be stainless steel.

9.4 The silencer roof shall have a slight slope and the stiffener configuration shall be designed so that it does not hold water to eliminate the pooling of rain water. If necessary the stiffeners shall contain drain holes in areas that could collect rain water or snow melt. Stiffeners shall be continuously welded to the shell plate.

9.5 Special consideration shall be given to the reinforcement of the leading edge (nose) of baffles to deal with the thermal shocks. The baffle supports shall be designed to provide a minimum 4 inches of end bearing.

9.6 The lifting lugs for the shell sections shall be a minimum of 3/4" carbon steel. The design shall provide enough lifting lugs to lift and maneuver the components.

9.7 The components shall be properly braced for shipping so that no components are damaged and stressed beyond code allowable stresses and buckling criteria.

9.8 Additional material as required for the fabrication shall be per the Contractor's design and suitable for the given application.

9.9 The following minimum material requirements shall be adhered to in the design and fabrication of the replacement expansion joint between the transition duct and stack:

- A. The Design temperature of the expansion joint shall be 1250 Degrees F and Design pressure shall be +/- 2 PSIG.
- B. Joints shall be Flat Belt geometry.
- C. Outer cover shall consist of a PTFE/Fiberglass material with a 0.007" thick 100% PTFE laminate. The outer cover shall have a total thickness of 0.047" and a weight of 60oz/yd².

D. Inner layer shall consist of one 1” layers of fiberglass insulation encased by a 24oz vermiculite coated, SS wire inserted fiberglass cloth on the gas side and a 18 oz. fiberglass cloth on the outer side. The inner ply shall be mechanically fastened to the outer cover.

E. An internal double tabbed full cavity insulation pillow shall be provided. The pillow shall consist of fiberglass tempmat insulation encased by 24oz vermiculite coated, wire inserted fiberglass cloth.

F. The existing Expansion joint was fabricated by EJCON Corp. The following is EJCON’s contact information:

EJCON Corp.

P.O. Box 61266

5502 Shawland Road, Jacksonville, FL 32236-1266

Phone 904-786- 0622

Email: MikeC@Ejcon.com

Contact: Mike Crawford

10.0 Welding and Fabrication Tolerances

10.1 Fabrication tolerances shall be in accordance with industrial standards and shall be in accordance with the Contractor’s design drawings.

10.2 Quality and appearance of welding is extremely important and shall be in accordance with the practices and procedures of the AWS D1.1, Structural Welding Code, steel, and AWS D1.3, Structural Welding Code, Sheet Metal.

10.3 Welding shall be done in a horizontal position in the shop when possible.

All surfaces to be welded shall be suitably prepared and free of all foreign materials detrimental to welding such as grease, oil, dirt and paint.

Proper welding electrodes shall be selected from AWS keeping in mind the base metal to be welded and the welding process to be used.

10.4 Welding electrode SMAW A5.4 class E309 or A5.11 class E NiCrFe-3 is recommended to weld all Type 409 stainless steel to itself, or to other base metal. Alternate filler metal may be accepted subject to Jacksonville Electric Engineering review of welding procedure supported by qualification test records.

10.5 Only certified welders shall perform the welding.

10.6 The edge welding of 11 CrCb perforated sheets (at solid borders) shall be 100% effective in rigidity securing the sheet to the frames. All welds to the edges of perforated sheets shall be continuous with no stitch welding, except at location where thermal stresses can build up. The Contractor shall submit their 11 CrCb welding procedure for JEA review.

10.7 Flatness of exterior sheet surfaces shall be within one-fourth of an inch. Bolt hole location tolerance shall be plus or minus one-sixteenth of an inch. Unless otherwise noted on the design drawings, the inside bend radii for stainless steel parts shall be 3 times the plate thickness, minimum.

10.8 All external stiffeners shall be seal welded to prevent corrosion staining.

11.0 Protective Coatings

11.1 Shop Coating Spec

11.1.1 Remove all grease, oil, and foreign matter with Surface Cleaner # 3 in accordance with SSPC-SP1.

11.1.2 Follow with SSPC-SP10 Near White Blast Cleaning with a 1.0 to 3.0 mil profile.

11.1.3 Prime Coat Interior & Exterior: Carbozinc 11 Inorganic Zinc Green at 2.0 to 3.0 mils dft.

11.1.4 Finish Coat Exterior: Thermaline 4700 Silicone Finish Pearl Grey at 2.0 to 3.0 mils DFT.

11.2 Field Coating of Field Welded Areas

11.2.1 Remove all grease, oil, and foreign matter with Surface Cleaner # 3 in accordance with SSPC-SP1.

11.2.2 Follow with SSPC-SP10 Near White Blast Cleaning with a 1.5 to 2.5 mil profile.

11.2.3 Prime Coat: Thermaline 4765 at 2.0 mils DFT.

11.2.4 Finish Coat Exterior: Thermaline 4700 Silicone Finish Pearl Grey at 2.0 to 3.0 mils DFT.

12.0 Shipment

12.1 The Contractor shall be fully responsible for the safe shipment, storage and handling of the components of the exhaust silencer stack system. The Contractor shall be fully responsible for the exhaust silencer system on the job site until the system is turned over to the Plant. The contractor is responsible for all shipping costs and for all truck loading and unloading of material at the job site.

12.2 Miscellaneous parts shall be packed in suitable boxes for storage at the job site.

13.0 Documentation

13.1 Calculations

13.1.1 The Contractor shall submit design calculations for approval, prior to the start of fabrication. The Contractor shall verify the sound attenuation, the structural and thermal design characteristics of the exhaust stack.

13.1.2 The design calculations, and all other documentation listed herein, shall be submitted to the JEA Project Manager.

13.1.3 The Contractor shall perform heat transfer analysis across the exhaust stack wall to ensure that the specified temperature limit is not exceeded.

13.1.4 The Contractor shall provide certified design information with respect to the pressure drop for the exhaust silencer stack system under base and peak load ratings.

13.1.5 The Contractor shall provide structural calculations for the duct shell and support structure including all connection details

13.1.6 The Contractor shall perform finite element thermal analysis (FEA) of the exhaust silencer structural system to assure that the temperature stresses and deflections are within the applicable code limits. The effect of fatigue due to thermal cycle shall also be considered and that silencer life shall exceed 3,000 GT startup/shutdown cycles over a 20 year period.

13.2 Shop Drawings

13.2.1 The Contractor shall submit to JEA for approval outline component drawings in Auto Cad format. The Contractor shall commence fabrication after the shop drawings are approved.

13.2.2 The Contractor shall submit to JEA for record purposes, four hard copies and one AutoCad electronic file of the entire as built outline drawings.

14.0 Reference Drawings and Manuals

14.1 Drawings:

GE Dwg No	Description
115E2703 Sheet 1	Outline Mechanical GTRB & Load
5-c0004	Outline Mechanical GTRB & Load
C& W Fabricators Dwg. No.	Description
6900AX Sheet 1 of 7	MS7000FA Exhaust Assembly/Erection (Plan & Elevation View)
6900AX Sheet 2 of 7	MS7000FA Exhaust Assembly/Erection (Foundation Layout and Foundation Details)
6900AX Sheet 3 of 7	MS7000FA Exhaust Assembly/Erection (Section Views)
6900AX Sheet 4 of 7	MS7000FA Exhaust Assembly/Erection(Side Wall View)
6900AX Sheet 5 of 7	MS7000FA Exhaust Assembly/Erection (Roof and Floor View)
6900AX Sheet 6 of 7	MS7000FA Exhaust Assembly/Erection (Stack View)
6900AX Sheet 7 of 7	MS7000FA Exhaust Assembly/Erection (Stack Section)
6900WX	Weight and Center of Gravity Dwg Sheets 1 through 28
7350	Foundation Load Data Sheets 2 through 26

14.2 GE Reference Manuals

The maintenance manual of the General Electric Gas turbine Unit MS7000FA is available at Brandy Branch Plant. The Contractor shall design the replacement exhaust silencer by using the operating pressure and temperature and applicable loads. The exhaust silencer shall be checked for loads specified in ANSI/ASCE 7-2010.

15.0 Construction

15.1 Temporary Utilities

- A. JEA will provide limited 110V - 20 ampere single-phase and 480V - 60 ampere three-phase electrical power at designated locations in the gas turbine area. Contractor shall be responsible for additional power supply (Generator) requirements and transformers to provide any other required voltages. Contractor shall make electrical connections and supply sufficient quantities and lengths of cables and electrical connectors in safe working order.
- B. Service air for construction activities is not available.
- C. Isolating and tagging out of equipment prior to work by the Contractor will be provided by JEA.
- D. Contractor to provide designated trash dumpsters, labeled by debris type.
- E. Contractor to provide adequate sanitary facilities for all their personnel serviced at a minimum 3 times a week.
- F. Contractor to provide any required break areas for personnel.

15.2 Laydown & Assembly Area

The Contractor shall notify the JEA Project manager of the size of their required laydown and assembly area. The laydown and assembly location will be determined jointly by the JEA Project Manager and Contractor.

15.3 Project Schedule

- A. The tentative outage schedule for Brandy Branch CT1 will be provided once the equipment fabrication time, shipping duration and assembly time is known. Outage for installation would likely fall in either spring or fall outside of peak load seasons.

- B. Contractor shall provide the JEA Project Manager a detailed resource loaded project schedule within 2 weeks of award. Schedule shall outline all project details including but not limited to: Mobilization, Assembly, demobilization.
- C. The project schedule for this Contract shall be prepared and maintained by Contractor to provide coordination between subcontractors and suppliers, to establish the basis for measuring and monitoring Contractor progress and overall Project progress, to detect problems for the purpose of taking corrective action.

15.4 Project Meetings

- A. Once Contractor has mobilized to Jobsite, JEA and Contractor representatives shall meet daily to update the following:

- Current status of the job progress
 - Look-Ahead Schedule (requirements listed in Item B. below)
 - Current and projected manpower
 - Changes in the Work
 - Safety and Quality Control issues
 - Problem areas or concerns

- B. The Look-Ahead Schedule shall:

- Report all planned work that is to be accomplished during the current week and the next two weeks in support of, and in accordance with, Contractor's detailed Construction Schedule

- Be personnel and resource loaded

- Report the planned and actual progress of the previous week

- Report critical activities that are identified to be completed by others, the delay of which would prevent Contractor from starting and completing its planned work activities in accordance with the detailed Construction Schedule

16 Safety

16.1 Contractors shall be safety prequalified through JEA Safety and Health services prior to award of purchase order.

16.2 ALL personnel shall have documented testing for substance abuse within 30 days of reporting to JEA facility for work.

16.3 All subcontractors shall be safety prequalified with appropriate training prior to working on JEA site.

All personnel shall have training per below requirement:

JEA Construction Site Safety Orientation (JEA CSSO) conducted by the Northeast Florida Safety Council (NEFSC)
This course is a modified version of the NCCER CSSO course and is specific for JEA as it includes the additional 2-hour JEA Operation Specific Safety Training. The JEA CSSO course is only available at the NEFSC.

- Or -

National Center for Construction Education and Research (NCCER) 8-hour Construction Site Safety Orientation (CSSO) and 2-hour JEA Operation Specific Safety Training
This option is for those students who have not taken the JEA specific CSSO class at the Northeast Florida Safety Council.)

- Or -

OSHA 10-hour for Construction Safety and Health and 2-hour JEA Operation Specific Safety Training

In addition to meeting the requirements of employees listed above, **supervisors/foremen** are required to attend the Safety Leadership Development program offered through NEFSC or an equivalent program.

To become prequalified visit:

https://www.jea.com/About/Procurement/Become_a_Vendor/Contractor_Safety/Qualification_Requirements/

Or contact **Jerry Fulop, Phone:** 904-665-5810, **Email:** FULOJE@JEA.COM or safety@jea.com

APPENDIX B – FORMS

023-18 BRANDY BRANCH GENERATING STATION COMBUSTION TURBINE (CT) B51 EXHAUST DUCT SILENCER REPLACEMENT PROJECT

MINIMUM QUALIFICATION

The minimum qualifications shall be submitted in the format attached. The report shall be presented in the order described below. In order to be considered a qualified supplier by JEA you must meet all the criteria listed and be able to provide all the services listed in this specification.

The supplier must complete **one (1) original, three (3) duplicate (copy) and one (1) CD or Thumb Drive** of the following information and any other information or attachments.

BIDDER INFORMATION

COMPANY NAME: _____

BUSINESS ADDRESS: _____

CITY, STATE, ZIP CODE: _____

TELEPHONE: _____

FAX: _____

E-MAIL: _____

- The Company shall have either successfully completed two (2) similar projects in the last five (5) years, date ending the Bid Due Date. A similar project is defined as a power production combustion turbine exhaust component replacement project (this may include, expansion joints, transitions, silencers and stack assemblies). The combustion turbine shall have been greater than 100 MW and each project shall have been greater than \$750,000.00 in value.

1. Primary Nature of Service Provided _____

Geographic Location _____

Client _____

Reference Name _____

Reference Phone Number _____

Annual Cost _____

Number of Networked Devices _____

Description of Project

061-18 APPENDIX B BID FORM**BRANDY BRANCH GENERATING STATION B51 EXHAUST DUCT SILENCER REPLACEMENT PROJECT**

Submit an **original, two (2) copies and one (1) CD or thumb drive** along with other required forms in a sealed envelope to: JEA Procurement Dept., 21 W. Church St., Bid Office, Customer Center, 1st Floor, Room 002, Jacksonville, FL 32202-3139.

Company Name: _____

Company's Address _____

License Number _____

Phone Number: _____ FAX No: _____ Email Address: _____

BID SECURITY REQUIREMENTS

- ☐ None required
☒ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☐ Annual Requirements
☒ Other, Specify- Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Response Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☐ None required
☒ Bond required 100% of Bid Award

QUANTITIES

- ☒ Quantities indicated are exacting
☐ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☐ None Offered

Item No.	ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES	TOTAL BID PRICE
1	Total Bid Price – 023-18 - BRANDY BRANCH GENERATING STATION COMBUSTION TURBINE (CT) B51 EXHAUST DUCT SILENCER REPLACEMENT PROJECT	\$ _____

☐ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

BIDDER CERTIFICATION

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation.

We have received addenda _____

Handwritten Signature of Authorized Officer of Company or Agent _____ Date _____

_____ through _____

Printed Name and Title