



May 25, 2012 123-89542

Mr. Jon Holtom, PE, Power Plant Permitting Group Administrator Office of Permitting and Compliance Division of Air Resource Management Florida Department of Environmental Protection Bob Martinez Center 2600 Blair Stone Road Tallahassee. FL 32399-2400

RECEIVED

JUN 04 2012

DIVISION OF AIR RESOURCE MANAGEMENT

RE:

ORLANDO UTILITIES COMMISSION—INDIAN RIVER POWER PLANT TITLE V REVISION APPLICATION—PERMIT NO. 0090008-007-AV RESPONSE TO RAI DATED MARCH 2, 2012

Dear Mr. Holtom:

Orlando Utilities Commission (OUC) and Golder Associates Inc. (Golder) have received the Florida Department of Environmental Protection (FDEP) request for additional information (RAI) dated March 2, 2012, regarding its Title V revision application submitted on February 9, 2012. Each of FDEP's requests is answered below, in the same order as they appear in the RAI letter. The associated revised application forms are included as part of this RAI response.

Comment 1.

With the incorporation of the three existing gas- and oil-fired boilers (Units 1, 2, and 3) formerly owned by GenOn, LLC, into the OUC Title V permit, the combined facility has sufficient potential emissions to be a major source of hazardous air pollutants (HAP). As such, the Indian River facility is potentially subject to regulation pursuant to 40 CFR 63, Subpart UUUUU — National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR 63, Subpart YYYY — National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. Please address the applicability of these rules for all of the emissions units at the combined facility.

The Department understands that the fuel oil tanks associated with these boilers are currently empty, so if the boilers were to operate, the only available fuel is natural gas. If OUC were to accept a federally enforceable limit to only burn natural gas in these boilers, it appears that 40 CFR 63, Subpart UUUUU would no longer apply. If this is a desirable option to OUC, please submit a request to process an air construction permit revision to limit the fuel to natural gas.

Response:

OUC has confirmed that the incorporation of the three existing gas- and oil-fired boilers (Units 1, 2, and 3) formerly owned by GenOn, LLC, into the OUC Title V permit results in the combined facility having sufficient potential emissions to be a major source of hazardous air pollutants (HAPs). Given the potential HAP emissions and the implications of regulation pursuant to 40 CFR 63, Subpart UUUUU, OUC has elected to accept a federally enforceable permit condition that restricts operation of the affected units (i.e., Units 1, 2 and 3) to natural gas or propane gas-firing only. Applicability to Subpart YYYY is not an issue as these would all be existing (and not affected) units under the rule. Therefore, OUC is requesting concurrent Title V revision and air construction permit processing to create federally enforceable permit limits needed to ensure NESHAP compliance. The associated application forms are included as Attachment 1 to this letter.

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#### Comment 2.

If OUC chooses to fire only natural gas to escape regulation under Subpart UUUUU and does not intend to use the oil tanks, they could be listed as retired and not included into the OUC permit as allowable emissions sources. Please let us know whether OUC would like to permanently retire these tanks or if they should be revised into the OUC Title V permit as potential emissions units.

#### Response:

As stated above, OUC has elected to fire only natural gas or propane gas in the steam units. However, a decision has not been made regarding the use of the residual oil tanks. When a decision is made, OUC will seek the pertinent permit approvals.

#### Comment 3.

In addition to the former GenOn emergency generator identified in this application, please specify if any other emergency generators, fire pumps or general purpose engines at the facility are subject to either: 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (ICE); 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines; Subpart JJJJ – Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines. If applicable, please specify how the facility is complying with the applicable subpart(s) and provide the following information:

- 3.a. What type of fuel does the engine use (include sulfur content)?
- 3.b. What type of engine do you have (ex. Compression ignition or diesel (CI), spark ignition (SI), four stroke spark ignition that is lean burn (4SLB), two stroke lean burn (2SLB), dual (natural gas plus diesel) fired or landfill gas fired.)
- 3.c. What is the HP (Hint: 1 HP = 0.7456 KW) of the stationary engine?
- 3.d. Is the engine a stationary engine and therefore subject to the RICE requirements in the NESHAP or the NSPS? By contrast, a mobile (or relocatable) source engine could be a temporary replacement unit and located at a stationary source for less than 1 year and has been properly certified (with an engine label) as meeting the standards that would be applicable to such engine under the appropriate non-road engine provisions.
- 3.e. Has the engine been reconstructed? Upon reconstruction, an existing engine becomes subject to the relevant standards for new sources, including compliance dates, irrespective of any changes in emissions of hazardous air pollutants from that source; therefore, has the engine ever had components replaced to such an extent that:
  - (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital const that would be required to construct a comparable new source; and
  - (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act.
- 3.f. What is the date of manufacture of the engine (year and month, if possible)? Note: Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility.
- 3.g. Is the engine EPA Certified and labeled (what Tier of emission standards does the engine meet, if any)?
- 3.h. When did you commence construction (date the engine was ordered) or reconstruction on your stationary engine (month, day and year)?
- 3.i. What is the engine displacement (liters per cylinder)?
- 3.j. Does the engine use an oxidation catalyst, diesel particulate filter (DPF), or selective catalytic reduction (SCR) (specify any controls employed)?



- 3.k. Does the engine have a continuous emissions monitoring system (CEMS) for any pollutants or a continuous parameter monitoring system (CPMS)?
- 3.I. What are the total hours of operation per year for the engine (estimate or based on historical)?
- 3.m. How many of the total hours are during an emergency situation (estimate or historical)?
- 3.n. How many of the total hours, if any, are part of the demand response program (if applicable)?
- 3.o. Is the engine used for peak shaving, to generate income for a facility, to supply power to an electrical grid, or supply power as part of a financial arrangement with another entity (state if future operation will include these modes of operation)?
- 3.p. For Fire Pumps: Is the engine part of a fire pump and was the engine manufactured as a certified National Fire Protection Association (NFPA) engine after July 1, 2006? Is the engine a high speed engine (operation rated at or above 2,650 rpm)?

#### Response:

There are three stationary engines currently located at the Indian River Power Plant. The engine manufacturer and model information is given below, as well as the response to each comment, in the order that it appeared in the RAI:

| Engine Parameter  | Engine #1   | Engine #2   | Engine #3  |
|---|---|---|--|
| Engine Manufacturer   | Caterpillar   | Detroit Diesel  | Detroit Diesel                                       |
| Engine Model Number   | D343A   | 12V-71  | 12V-71   |
| 3.a. Type of fuel used and sulfur content                           | Diesel Fuel<br>(0.015-percent<br>sulfur by weight)              | Diesel Fuel<br>(0.015-percent<br>sulfur by weight)            | Diesel Fuel<br>(0.015-percent<br>sulfur by weight)   |
| 3.b. Type of engine   | Compression<br>Ignition   | Compression<br>Ignition                                       | Compression<br>Ignition                              |
| 3.c. Engine Horsepower Rating                                       | 235 HP  | 800 HP  | 800 HP   |
| 3.d. Stationary or relocatable                                      | Stationary  | Stationary  | Stationary   |
| 3.e. Original or reconstructed                                      | Original  | Original  | Original   |
| 3.f. Manufacture date   | 1964  | 1990  | 1990   |
| 3.g. EPA certification  | None  | None  | None   |
| 3.h. Date of construction/reconstruction                            | 1964  | 1990  | 1990   |
| 3.i. Engine displacement  | 2.43 L/cylinder   | 1.164   | 1.164  |
| 3.j. Emissions controls   | None  | None  | None   |
| 3.k. Emissions/parameter monitoring systems                         | None  | None  | None   |
| 3.l. Annual operating hours (and basis)                             | <100 hr/yr<br>(maintenance<br>checks &<br>readiness<br>testing) | 20 hr/yr<br>(estimate based<br>on prior 3 years<br>operation) | 20 hr/yr (estimate based on prior 3 years operation) |
| 3.m. Annual operating hours during emergency situations (and basis) | All other operating hours                                       | 0   | 0.   |
| Annual operating hours as part of a demand response program         | 0 hours   | 0   | 0  |



| Engine Parameter   | Engine #1               | Engine #2               | Engine #3               |
|--|-------------------------|-------------------------|-------------------------|
| 3.o. Engine use for peak shaving, to generate income, supply power to an electrical grid, or supply power as part of a financial arrangement with another entity | No                      | No                      | No                      |
| 3.p. Fire Pump: Manufactured as a certified NFPA engine after July 1, 2006? Operated at rates higher than 2,650 rpm?   | Not part of a fire pump | Not part of a fire pump | Not part of a fire pump |

Therefore, the three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60, Subpart IIII or Subpart JJJJ, due to their age. The application forms have been updated accordingly and are included in Attachment 1.

The two 800 HP engines are limited use (<100 hr/yr), and so would only be subject to minimizing idle time during startup to less than 30 minutes.

The 235 HP engine is an emergency engine, and so would be subject to the following requirements:

- Change oil and oil filter every 500 hours of operation or annually (whichever comes first)
- Inspect air filter every 1,000 hours of operation or annually (whichever comes first) and replace as necessary
- Inspect all hoses and belts every 500 hours of operation or annually (whichever comes first) and replace as necessary
- Minimize time spent in idle and minimize startup time to less than 30 minutes
- Install a non-resettable hour meter (if one isn't already installed)

#### Comment 4.

The communications that OUC staff has recently had with the Department regarding complying with the best available retrofit technology (BART) requirements have identified some potential options that need to be decided upon soon. One option is to permanently shut down units no later than December 31, 2013. It is our understanding that Unit 2 may have already been partially dismantled by GenOn. Another option is to provide the full five-factor BART analysis for Units 2 and 3 (Unit 1 is not a BART affected unit). A third option would be to place Units 1-3 into a long-term reserve shutdown mode. If this option is chosen, a federally enforceable condition would need to be established that would require the submission for the five-factor BART analysis and implementation of any resultant control technology prior to commencing operation in the future. OUC could elect to combine these decisions with the revision project by requesting a concurrent air construction permit to create any federally enforceable permit limits needed to ensure BART compliance. Filing this request would provide the opportunity for OUC to publish a single public notice for all the current revisions. Please let us know how OUC would like to proceed.

#### Response:

A Best Available Retrofit Technology (BART) exemption modeling analysis for the BART-eligible emissions units (i.e., Unit No. 2 and Unit No. 3) was previously submitted to the Florida Department of Environmental Protection (FDEP) in 2007 which included only particulate matter (PM) emissions and demonstrated that no further BART evaluations were needed to comply with the BART regulations. At that time, Reliant Energy Indian River, LLC owned Unit No. 2 and Unit No. 3 at the Indian River Power Plant and subsequently transferred ownership to GenOn Florida, LP. In January 2012, GenOn Florida, LP sold those units to OUC.

This current report (Attachment 2 -- BART Exemption Modeling Analysis) presents a revised BART exemption analysis which includes nitrogen oxides (NOx) and sulfur



dioxide (SO<sub>2</sub>) emissions from the BART-eligible emissions units at this plant. As previously stated, in April 2012, OUC committed to firing only natural gas or propane gas in Unit Nos. 2 and 3. As a result, BART modeling results presented in the attached report reflect PM, NOx, and SO<sub>2</sub> emissions for firing only natural gas or propane gas at these units. As shown in Tables 2 and 3, the 8th highest visibility impairment values predicted for each year at the PSD Class I areas using the new 1999 IMPROVE algorithm are less than 0.5 dv. The 22nd highest visibility impairment value predicted over the 3-year period at these PSD Class I areas is also less than 0.5 dv. As a result, Unit Nos. 2 and 3 are not subject to further BART requirements, such as a BART determination analysis, based on the exemption modeling results.

Given the results of the BART exemption modeling analysis, OUC has elected to accept a federally enforceable permit condition that restricts operation of the BART-affected units (i.e., Units 2 and 3) to natural gas or propane gas -firing only. Therefore, OUC is requesting concurrent Title V revision and air construction permit processing to create federally enforceable permit limits needed to ensure BART compliance.

Comment 5.

Please submit updated Acid Rain and CAIR forms for Units 1-3 signed by OUC's Designated Representative.

Response:

The updated forms are included as Attachment 1 to this letter.

Finally, although not addressed in the Department's RAI, this application package also includes OUC's request to revise IRP's current Title V air permit (Permit No. 0090008-005-AV) language with respect to the combustion turbines and associated COMS requirements. Therefore, Attachment 3 to this letter includes the original air application for this revision, sent to the Department on January 16, 2012.

Thank you for your consideration of this information. If you have any questions, please do not hesitate to call us at (352) 336-5600.

Sincerely,

**GOLDER ASSOCIATES INC.** 

Scott Osbourn, PE

Associate and Senior Consultant

Philip D. Cobb, PhD, PE Senior Project Engineer

**Enclosures** 

cc:

David Baez, OUC Michael Kyhos, OUC



ATTACHMENT 1



## RECEIVED **Department of Environmental Protection**

JUN 04 2012

DIVISION OF AIR RESOURCE MANAGEMENT

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 any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

**Air Operation Permit** – Use this form to apply for:

An initial federally enforceable state air operation permit (FESOP); or

1. Facility Owner/Company Name: Orlando Utilities Commission

• An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

#### **Identification of Facility**

Site Name: Indian River Plant

| 3.        | Facility Identification Number: 0090008  |  |  |  |  |
|-----------|--|--|--|--|--|
|           | Facility Location  |  |  |  |  |
|           | Street Address or Other Locator: US 1 & Kings Hwy                                |  |  |  |  |
|           | City: Titusville County: Brevard Zip Code: 32780                                 |  |  |  |  |
| 5.        | Relocatable Facility?  6. Existing Title V Permitted Facility?                   |  |  |  |  |
|           | Yes X No X Yes No  |  |  |  |  |
| <u>Ap</u> | plication Contact  |  |  |  |  |
| 1.        | Application Contact Name: Michael Kyhos CHMM, QEP, Senior Environmental Engineer |  |  |  |  |
| 2.        | Application Contact Mailing Address  |  |  |  |  |
|           | Organization/Firm: Orlando Utilities Commission                                  |  |  |  |  |
|           | Street Address: 5100 Alafaya Trail   |  |  |  |  |
|           | City: Orlando State: FL Zip Code: 32831  |  |  |  |  |
| 3.        | Application Contact Telephone Numbers  |  |  |  |  |
|           | Telephone: (407) 434 - 3036 ext. Fax: (407) 244 - 8794                           |  |  |  |  |
| 4.        | Application Contact E-mail Address: MKyhos@ouc.com                               |  |  |  |  |
| Ap        | Application Processing Information (DEP Use)                                     |  |  |  |  |

3. PSD Number (if applicable): 4. Siting Number (if applicable):

1. Date of Receipt of Application:

2. Project Number(s):

## **Purpose of Application**

| This application for air permit is being submitted to obtain: (Check one)   |
|---|
| Air Construction Permit   |
| ☐ Air construction permit.  |
| Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).   |
| Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL. |
| 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)  |
| X 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:                                 |
| X 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**

These application forms are submitted in response to FDEP's request for additional information (RAI) dated March 2, 2012, regarding Orlando Utilities Commission (OUC's) Indian River Plant (IRP) Title V revision application submitted on February 9, 2012.

In addition, OUC is requesting to revise IRP's current Title V air permit (Permit No. 0090008-005-AV) language with respect to the combustion turbines and associated COMS requirements. (Note: Original air application for the above mentioned revision to Title V Permit No. 0090008-005-AV sent to FDEP on January 16, 2012.)

OUC believes that the COMS periodic monitoring condition is troublesome as worded. Pursuant to 40 CFR 75.14, gas-fired turbines units are NOT required to install COMS. Condition C.7 was originally meant to apply to the electric utility steam generating units onsite, which were once owned and operated by OUC and included in the Title V permit with the combustion turbines. The permit language is a legacy issue, as this language was inadvertently retained in OUC's permit even though the steam units were removed from the permit. Based on previous discussions, the Department is agreeable to deleting the condition entirely. Therefore, OUC is requesting deletion of Condition C.7 with this application for a Title V permit revision (public notice required).

OUC also requests that EU009 - Unregulated Emission Units and Activities from both the RRI IRP Permit No. 0090196-013-AV as well as the OUC IRP Permit No. 0090008-005-AV be removed from the Title V Permit as a numbered unregulated emission unit and included in a list format in Appendix I-1, List of Insignificant Emissions Units and Activities.

The above mentioned requested changes to current Title V Air Operation Permit are provided as Attachment IRP-FI-TV6.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

## **Scope of Application**

| Description of Emissions Unit  | Air<br>Permit<br>Type   | Air Permit<br>Processing<br>Fee  |
|--|---|--|
| Jnits under Permit No. 0090008-005-AV.   |   |  |
| 35 MW Simple Cycle Combustion Turbine A  |   |  |
| 129 MW Simple Cycle Combustion Turbine C   |   |  |
| 129 MW Simple Cycle Combustion Turbine D   |   |  |
| 35 MW Simple Cycle Combustion Turbine B  |   | _  |
| One No. 2 Fuel Oil Tank (150,000 gallon capacity)  |   |  |
| Two 800 HP Diesel Fuel Engines   |   |  |
| Inits under Permit No. 0090196-013-AV.  87 MW Unit No.1 Boiler   |   |  |
| 188 MW Unit No.2 Boiler  |   |  |
| 328 MW Unit No.3 Boiler  | _   |  |
| Lime Storage Silo  |   |  |
| 235 HP Diesel Fuel Engine  |   |  |
| Two No. 6 Fuel Oil Storage Tanks, each with a capacity of 3.67 million gallons; One No. 6 Fuel Oil Storage Tank with a capacity of 7.5 million gallons; One No. 2 Fuel Oil Storage Tank with a capacity of 34,500 gallons; One Gasoline Fuel Storage "Day" Tank with a capacity of 500 gallons; and Fuel loading and unloading activities. |   |  |
|  | Description of Emissions Unit  Ditts under Permit No. 0090008-005-AV.  35 MW Simple Cycle Combustion Turbine A  129 MW Simple Cycle Combustion Turbine C  129 MW Simple Cycle Combustion Turbine D  35 MW Simple Cycle Combustion Turbine B  One No. 2 Fuel Oil Tank (150,000 gallon capacity)  Two 800 HP Diesel Fuel Engines  Ditts under Permit No. 0090196-013-AV.  87 MW Unit No.1 Boiler  188 MW Unit No.2 Boiler  188 MW Unit No.3 Boiler  Lime Storage Silo  235 HP Diesel Fuel Engine  Two No. 6 Fuel Oil Storage Tanks, each with a capacity of 3.67 million gallons; One No. 6 Fuel Oil Storage Tank with a capacity of 7.5 million gallons; One No. 2 Fuel Oil Storage Tank with a capacity of 34,500 gallons; One Gasoline Fuel Storage "Day" Tank with a capacity of 500 gallons; and | Description of Emissions Unit Type  Units under Permit No. 0090008-005-AV.  35 MW Simple Cycle Combustion Turbine A  129 MW Simple Cycle Combustion Turbine D  35 MW Simple Cycle Combustion Turbine B  One No. 2 Fuel Oil Tank (150,000 gallon capacity)  Two 800 HP Diesel Fuel Engines  Units under Permit No. 0090196-013-AV.  87 MW Unit No.1 Boiler  188 MW Unit No.2 Boiler  328 MW Unit No.3 Boiler  Lime Storage Silo  235 HP Diesel Fuel Engine  Two No. 6 Fuel Oil Storage Tanks, each with a capacity of 3.67 million gallons; One No. 2 Fuel Oil Storage Tank with a capacity of 7.5 million gallons; One No. 2 Fuel Oil Storage Tank with a capacity of 34,500 gallons; One Gasoline Fuel Storage "Day" Tank with a capacity of 500 gallons; and |

| Application I | Processing Fee        |   |                |  |
|---------------|-----------------------|---|----------------|--|
| Check one:    | Attached - Amount: \$ | X | Not Applicable |  |

### **Owner/Authorized Representative Statement**

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

| 1. | . Owner/Authorized Representative Name :  |                    |           |  |  |
|----|---|--------------------|-----------|--|--|
| 2. | Owner/Authorized Representative Mailing Address Organization/Firm:  |                    |           |  |  |
|    | Street Address:   |                    |           |  |  |
|    | City:   | State:             | Zip Code: |  |  |
| 3. | Owner/Authorized Representative   | Telephone Numbers. |           |  |  |
|    | Telephone: ( ) - ext.   | Fax: ( ) -         |           |  |  |
| 4. | . Owner/Authorized Representative E-mail Address:   |                    |           |  |  |
| 5. | Owner/Authorized Representative Statement:  |                    |           |  |  |
|    | I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department. |                    |           |  |  |
|    | Signature   |                    | Date      |  |  |

DEP Form No. 62-210.900(1) – Form

Effective: 03/11/2010

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### **Application Responsible Official Certification**

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

| 1.   | Application Responsible Official Name: Jan C. Aspuru, Vice President of Power Resources  |  |  |  |
|------|--|--|--|--|
| 2.   | Application Responsible Official Qualification (Check one or more of the following options, as applicable):  |  |  |  |
|      | 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.  |  |  |  |
|      | For a partnership or sole proprietorship, a general partner or the proprietor, respectively.   |  |  |  |
|      | X For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.  |  |  |  |
|      | The designated representative at an Acid Rain source or CAIR source.   |  |  |  |
| 3.   | Application Responsible Official Mailing Address Organization/Firm: Orlando Utilities Commission   |  |  |  |
|      | Street Address: Reliable Plaza, 100 West Anderson Street   |  |  |  |
|      | City: Orlando State: FL Zip Code: 32801  |  |  |  |
| 4.   | Application Responsible Official Telephone Numbers  Telephone: (407) 434 - 3135 ext. Fax: (407) 275 - 4120   |  |  |  |
| 5.   | Application Responsible Official E-mail Address: <u>jaspuru@ouc.com</u>  |  |  |  |
| 6.   | Application Responsible Official Certification:  |  |  |  |
| 1, 1 | 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. |  |  |  |
| _(   | Signature Date   |  |  |  |

DEP Form No. 62-210.900(1) - Form

|    | oresional Engineer Certification   |  |  |
|----|--|--|--|
| 1. | Professional Engineer Name: Scott H. Osbourn, Senior Consultant  |  |  |
|    | Registration Number: 57557   |  |  |
| 2. | Professional Engineer Mailing Address  |  |  |
|    | Organization/Firm: Golder Associates, Inc.**   |  |  |
|    | Street Address: 5100 West Lemon Street, Suite 114  |  |  |
|    | City: Tampa State: FL Zip Code: 33609  |  |  |
| 3. | Professional Engineer Telephone Numbers  |  |  |
|    | Telephone: (813) 287-1717 ext. Fax: (813) 287-1716   |  |  |
| 4. | Professional Engineer E-mail 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 $\square$ , 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 $\boxed{\mathbf{X}}$ , 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 Date   |  |  |

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<sup>\*</sup> Attach any exception to certification statement.
\*\*Board of Professional Engineers Certificate of Authorization #0000167.

# II. FACILITY INFORMATION A. GENERAL FACILITY INFORMATION

### **Facility Location and Type**

| 1.   |                             | dinates<br>(km) <b>521.3</b><br>th (km) <b>3151.7</b> | 2. | Facility Latitude/Lo<br>Latitude (DD/MM/<br>Longitude (DD/MM | SS) 28°29'36"N              |
|--|-----------------------------|---|----|--|-----------------------------|
| 3.   | Governmental Facility Code: | 4. Facility Status Code:                              | 5. | Facility Major Group SIC Code: 49                            | 6. Facility SIC(s):<br>4911 |
| 7. Facility Comment : Electric Power Plant |                             |   |    |  |                             |

#### **Facility Contact**

| 1. | Facility Contact Name: Michael Kyhos, Senior Environme | ental Engineer |                        |  |  |
|----|--|----------------|------------------------|--|--|
| 2. | Facility Contact Mailing Address                       | •••            |                        |  |  |
|    | Organization/Firm: Orlando Utilities Commission        |                |                        |  |  |
|    | Street Address: 5100 Alafaya                           | Trail          |                        |  |  |
|    | City: Orlando  | State: FL      | Zip Code: <b>32831</b> |  |  |
| 3. | Facility Contact Telephone Numb                        | pers:          |                        |  |  |
|    | Telephone: (407) 434 - 3036                            | ext.           | Fax: (407) 244 - 8794  |  |  |
| 4. | Facility Contact E-mail Address:                       | MKyhos@ouc.com |                        |  |  |

#### **Facility Primary Responsible Official**

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

| 1. | Facility Primary Responsible | Official Name:             |           |
|----|------------------------------|----------------------------|-----------|
| 2. | Facility Primary Responsible | Official Mailing Address   |           |
|    | Organization/Firm:           |                            |           |
|    | Street Address:              |                            |           |
|    | City:                        | State:                     | Zip Code: |
| 3. | Facility Primary Responsible | Official Telephone Numbers |           |
|    | Telephone: ( ) - ext         | . Fax: ( ) -               |           |
| 4. | Facility Primary Responsible | Official E-mail Address:   |           |

### **Facility Regulatory Classifications**

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

| <u> </u>  |
|---|
| 1. Small Business Stationary Source Unknown   |
| 2. Synthetic Non-Title V Source   |
| 3. X Title V Source   |
| 4. X Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)   |
| 5. Synthetic Minor Source of Air Pollutants, Other than HAPs  |
| 6. X Major Source of Hazardous Air Pollutants (HAPs)  |
| 7. Synthetic Minor Source of HAPs   |
| 8. X One or More Emissions Units Subject to NSPS (40 CFR Part 60)   |
| 9. One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)  |
| 10. X One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)   |
| 11. Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))  |
|   |
| 12. Facility Regulatory Classifications Comment:  |
| 12. Facility Regulatory Classifications Comment:  The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60, Subpart IIII or Subpart JJJJ, due to their age. |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |
| The three engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60,   |

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## **List of Pollutants Emitted by Facility**

| 1. Pollutant Emitted                    | 2. Pollutant Classification | 3. Emissions Cap [Y or N]? |
|---|-----------------------------|----------------------------|
| NO <sub>x</sub>                         |                             |                            |
| CO                                      |                             |                            |
| SO <sub>2</sub>                         |                             |                            |
| PM/ PM <sub>10</sub> /PM <sub>2.5</sub> |                             |                            |
| VOC                                     |                             |                            |
|   |                             |                            |
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|   | -                           |                            |
|   | -                           |                            |
|   |                             |                            |

### **B. EMISSIONS CAPS**

## Facility-Wide or Multi-Unit Emissions Caps

| 1. Pollutant Subject to Emissions | 2. Facility-<br>Wide Cap<br>[Y or N]? | 3. Emissions Unit ID's Under Cap | 4. Hourly<br>Cap<br>(lb/hr) | 5. Annual<br>Cap<br>(ton/yr) | 6. Basis for Emissions Cap |
|-----------------------------------|---------------------------------------|----------------------------------|-----------------------------|------------------------------|----------------------------|
| Cap                               | (all units)                           | (if not all units)               | ,                           |                              | •                          |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  | ٠                           |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |
|                                   |                                       |                                  |                             |                              |                            |

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

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### C. FACILITY ADDITIONAL INFORMATION

## Additional Requirements for All Applications, Except as Otherwise Stated

| 1.  | Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  X Previously Submitted, Date: May 20, 2009  |
|-----|---|
| 2.  | Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  X Previously Submitted, Date: May 20, 2009   |
| 3.  | Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  X Previously Submitted, Date: May 20, 2009 |
| Ad  | Iditional Requirements for Air Construction Permit Applications - NA  |
| 1.  | Area Map Showing Facility Location:  Attached, Document ID: Not Applicable (existing permitted facility)  |
| 2.  | Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):  Attached, Document ID:   |
| 3.  | Rule Applicability Analysis:  Attached, Document ID:  |
| 4.  | List of Exempt Emissions Units:  Attached, Document ID: Not Applicable (no exempt units at facility)  |
| 5.  | Fugitive Emissions Identification:  Attached, Document ID: Not Applicable   |
| 6.  | Air Quality Analysis (Rule 62-212.400(7), F.A.C.):  Attached, Document ID: Not Applicable   |
| 7.  | Source Impact Analysis (Rule 62-212.400(5), F.A.C.):  Attached, Document ID: Not Applicable   |
| 8.  | Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):  Attached, Document ID: Not Applicable   |
| 9.  | Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):  Attached, Document ID: Not Applicable   |
| 10. | Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):  Not Applicable   |

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## C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

### Additional Requirements for FESOP Applications - NA

| 1.         | List of Exempt Emissions Units:   |
|------------|---|
|            | Attached, Document ID: Not Applicable (no exempt units at facility)   |
| <u>A</u> c | Iditional Requirements for Title V Air Operation Permit Applications  |
| 1.         | List of Insignificant Activities: (Required for initial/renewal applications only)  Attached, Document ID: X Not Applicable (revision application)  |
| 2.         | Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)  Attached, Document ID:  X Not Applicable (revision application with no change in applicable requirements)  |
| 3.         | Compliance Report and Plan: (Required for all initial/revision/renewal applications)  Attached, Document ID: NA  Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
| 4.         | List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)  Attached, Document ID:  Equipment/Activities Onsite but Not Required to be Individually Listed  Not Applicable  |
| 5.         | Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)  Attached, Document ID: X Not Applicable  |
| 6.         | Requested Changes to Current Title V Air Operation Permit:  X Attached, Document ID: IRP-FI-TV6 Not Applicable  |

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### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

### Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

| 1. Acid Rain Program Forms:  |
|--|
| Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):                |
| X Attached, Document ID: : IRP-FI-ACID Previously Submitted, Date:         |
| Not Applicable (not an Acid Rain source)                                   |
| Phase II NO <sub>X</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.): |
| Attached, Document ID: Previously Submitted, Date:                         |
| X Not Applicable   |
| New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):                      |
| Attached, Document ID: Previously Submitted, Date:                         |
| X Not Applicable   |
| 2. CAIR Part (DEP Form No. 62-210.900(1)(b)):                              |
| X Attached, Document ID: IRP-FI-CAIR Previously Submitted, Date:           |
| Not Applicable (not a CAIR source)   |
| Tvot rippineuote (not a errite source)                                     |
|  |
| Additional Paguiramants Comment  |
| Additional Requirements Comment  |
|  |
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Section [1] of [6] 87 MW Unit No. 1 Boiler

#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [1] of [6] 87 MW Unit No. 1 Boiler

#### A. GENERAL EMISSIONS UNIT INFORMATION

### **Title V Air Operation Permit Emissions Unit Classification**

| or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)  |                             |  |   |  |  |
|---|-----------------------------|--|---|--|--|
| <ul> <li>The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</li> <li>The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</li> </ul> |                             |  |   |  |  |
| Emissions Unit Desc   | eription and Status         | •  |   |  |  |
| 1. Type of Emission   | s Unit Addressed in this    | s Section: (Check one)                               |   |  |  |
| .    —  |                             | Section addresses, as a s                            |   |  |  |
|   | -                           | activity, which produces definable emission point    |   |  |  |
| ·   |                             | •  | e emissions unit, a group                         |  |  |
| of process or   | production units and act    | tivities which has at least                          |   |  |  |
| ,   |                             | duce fugitive emissions.                             |   |  |  |
|   |                             | tion addresses, as a single activities which produce | e emissions unit, one or fugitive emissions only. |  |  |
| 2. Description of En  | nissions Unit Addressed     | l in this Section:                                   |   |  |  |
| O7 MIN OTHERO. 1 BC   | niei                        |  |   |  |  |
| 3. Emissions Unit Id  | lentification Number: 0     | nn1  |   |  |  |
| 4. Emissions Unit   | 5. Commence                 | 6. Initial Startup                                   | 7. Emissions Unit                                 |  |  |
| Status Code:  | Construction                | Date:  | Major Group                                       |  |  |
| A   | Date:                       | 02/01/60   | SIC Code:   |  |  |
| 8. Federal Program  | <br>Applicability: (Check a |  |   |  |  |
| X Acid Rain   | • •                         | <b></b>  |   |  |  |
| X CAIR Unit   |                             |  |   |  |  |
| 9. Package Unit: Combustion Engineering Steam Generator   |                             |  |   |  |  |
| Manufacturer:   | 1 . 7                       | Model Number:  |   |  |  |
| 10. Generator Namep   |                             |  |   |  |  |
| 11. Emissions Unit C  | omment:                     |  |   |  |  |
|   |                             |  |   |  |  |
|   |                             |  |   |  |  |

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| Emissions Unit Control Equipment/Method: Control of  |
|--|
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
| Emissions Unit Control Equipment/Method: Control of  |
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
| Emissions Unit Control Equipment/Method: Control of  |
| Emissions Unit Control Equipment/Method: Control of  |
| 1. Control Equipment/Method Description:   |
|  |
|  |
| 1. Control Equipment/Method Description:   |
|  |
| 1. Control Equipment/Method Description:   |
| Control Equipment/Method Description:     Control Device or Method Code:   |
| Control Equipment/Method Description:      Control Device or Method Code:      Emissions Unit Control Equipment/Method: Control of |
| Control Equipment/Method Description:      Control Device or Method Code:      Emissions Unit Control Equipment/Method: Control of |
| Control Equipment/Method Description:      Control Device or Method Code:      Emissions Unit Control Equipment/Method: Control of |

Section [1] of [6] 87 MW Unit No. 1 Boiler

## B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

| 1. | Maximum Process or Throughput Rate:                             |
|----|---|
| 2. | Maximum Production Rate:  |
| 3. | Maximum Heat Input Rate: 865.5 million Btu/hr                   |
| 4. | Maximum Incineration Rate: pounds/hr                            |
|    | tons/day  |
| 5. | Requested Maximum Operating Schedule:                           |
|    | 24 hours/day 7 days/week  |
|    | 52 weeks/year 8,400 hours/year                                  |
| 6. | Operating Capacity/Schedule Comment:                            |
| Th | e maximum heat input of 865.5 MMBtu/hr when firing natural gas. |

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## C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

#### **Emission Point Description and Type**

| Identification of Point on Plot Plan or Flow Diagram: |   | 2. Emission Point T                    | ype Code;                |   |  |  |
|---|---|--|--------------------------|---|--|--|
| 3.  | Descriptions of Emission  | Points Comprising                      | g this Emissions Unit    | for VE Tracking:  |  |  |
| 4.  | 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: |  |                          |   |  |  |
| 5.  | Discharge Type Code: <b>V</b>   | 6. Stack Height 300 feet               | :                        | <ol> <li>Exit Diameter:</li> <li>14 feet</li> </ol>                   |  |  |
| 8.  | Exit Temperature: 325 °F  | 9. Actual Volum<br><b>795,323</b> acfm | netric Flow Rate:        | 10. Water Vapor:  |  |  |
| 11.   | Maximum Dry Standard F<br>dscfm   | low Rate:                              | 12. Nonstack Emissi feet | on Point Height:  |  |  |
| 13.   | Emission Point UTM Coo<br>Zone: 17 East (km):<br>North (km)                         | 521.5                                  | Latitude (DD/MI          | .atitude/Longitude<br>M/SS) <b>28/29/36</b><br>MM/SS) <b>80/46/41</b> |  |  |
| 15.   | Emission Point Comment:   |  |                          |   |  |  |
| Boi   | ilers No. 1 and No. 2 share a   | a common stack.                        |                          |   |  |  |
|   |   |  |                          | · .   |  |  |

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### D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

| 1. Segment Description (Process/Fuel Type): Natural Gas |                  |                 |               |    |                                   |
|---|------------------|-----------------|---------------|----|-----------------------------------|
| 2. Source Cla   | ssification Code | e (SCC):        | 3. SCC Units: |    | eet of Natural Gas Burned         |
| 4. Maximum <b>0.83</b>                                  | Hourly Rate:     | 5. Maximum      | Annual Rate:  | 6. | Estimated Annual Activity Factor: |
| 7. Maximum  | % Sulfur:        | 8. Maximum      | % Ash:        | 9. | Million Btu per SCC Unit: 1041    |
| 10. Segment C   | omment:          |                 |               |    |                                   |
| Segment Desc  | ription and Ra   | te: Segment     | of_           |    |                                   |
| 1. Segment D  | escription (Proc | ess/Fuel Type): |               |    |                                   |
| Residual fuel oil will no longer be fired in this unit. |                  |                 |               |    |                                   |
| 2. Source Cla   | ssification Code | (SCC):          | 3. SCC Units: |    |                                   |
| 4. Maximum  | Hourly Rate:     | 5. Maximum      | Annual Rate:  | 6. | Estimated Annual Activity Factor: |
| 7. Maximum  | % Sulfur:        | 8. Maximum      | % Ash:        | 9. | Million Btu per SCC Unit:         |
| 10. Segment C   | omment:          |                 |               |    |                                   |

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### E. EMISSIONS UNIT POLLUTANTS

### List of Pollutants Emitted by Emissions Unit

| 1. Pollutant Emitted                    | Primary Control     Device Code | 3. Secondary Control Device Code | 4. Pollutant Regulatory Code |
|---|---------------------------------|----------------------------------|------------------------------|
| NO <sub>x</sub>                         |                                 |                                  |                              |
| СО                                      |                                 |                                  |                              |
| SO <sub>2</sub>                         |                                 |                                  |                              |
| PM/ PM <sub>10</sub> /PM <sub>2.5</sub> |                                 |                                  |                              |
| voc                                     |                                 |                                  |                              |
| Total HAPs                              |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 | <b>、</b>                         |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |
| /                                       |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |
|   |                                 |                                  |                              |

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## POLLUTANT DETAIL INFORMATION Page [1] of [6]

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 Della dell |   |                    |  |
|--|---|--------------------|--|
| 1. Pollutant Emitted: NO <sub>x</sub>  | 2. Total Percent Efficiency of Control: |                    |  |
| 3. Potential Emissions:  | 4. Synth                                | netically Limited? |  |
| lb/hour <b>421.</b> 7  | tons/year Y                             | 'es X No           |  |
| 5. Range of Estimated Fugitive Emissions (as to tons/year  | s applicable):                          |                    |  |
| 6. Emission Factor: 0.116 lb/MMBtu   |   | 7. Emissions       |  |
| Reference: <b>Test Data</b>  |   | Method Code:<br>1  |  |
| 8.a. Baseline Actual Emissions (if required):  | 8.b. Baseline 24-month                  | Period:            |  |
| tons/year  | From:                                   | Го:                |  |
| 9.a. Projected Actual Emissions (if required):   | 9.b. Projected Monitoring Period:       |                    |  |
| tons/year  |   | 0 years            |  |
| 10. Calculation of Emissions:  |   |                    |  |
|  |   |                    |  |
|  |   |                    |  |
|  |   | ·                  |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:   |   |                    |  |
| 11. 1 otomas, 1 agravo, and 1 otaur Dimosions Commons  |   |                    |  |
|  |   |                    |  |
|  |   |                    |  |
|  |   |                    |  |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions     | _ of   |  |  |
|---|--|--|--|
| 1. Basis for Allowable Emissions Code:      | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |
| 5. Method of Compliance:                    |  |  |  |
| 6. Allowable Emissions Comment (Descriptio  |  |  |  |
| Allowable Emissions Allowable Emissions     |  |  |  |
| Basis for Allowable Emissions Code:         | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |
| 5. Method of Compliance:                    |  |  |  |
| 6. Allowable Emissions Comment (Descriptio  | n of Operating Method):                              |  |  |
| Allowable Emissions Allowable Emissions     | _ of   |  |  |
| 1. Basis for Allowable Emissions Code:      | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |
| 5. Method of Compliance:                    |  |  |  |
| 6. Allowable Emissions Comment (Description | n of Operating Method):                              |  |  |

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POLLUTANT DETAIL INFORMATION
Page |2| of |6|

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| Totential, Estimated Fugitive, and Dasenne & Flojected Actual Emissions |   |                                  |  |
|---|---|----------------------------------|--|
| 1. Pollutant Emitted: CO  | 2. Total Percent Efficiency of Control:             |                                  |  |
| 3. Potential Emissions: lb/hour 83.8                                    | 4. stons/year                                       | Synthetically Limited?  Yes X No |  |
| 5. Range of Estimated Fugitive Emissions (as to tons/year               | applicable):  |                                  |  |
| 6. Emission Factor: 24 lb/MMscf  Reference: AP-42                       |   | 7. Emissions Method Code: 3      |  |
| 8.a. Baseline Actual Emissions (if required):                           | 8.b. Baseline 24-                                   | -month Period:                   |  |
| tons/year   | From:   | To:                              |  |
| 9.a. Projected Actual Emissions (if required): tons/year                | 9.b. Projected Monitoring Period:  5 years 10 years |                                  |  |
| 10. Calculation of Emissions:   |   |                                  |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:                  |   |                                  |  |
|   |   |                                  |  |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions   | _ of   |  |  |
|---|--|--|--|
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |
| 5. Method of Compliance:  |  |  |  |
| 6. Allowable Emissions Comment (Description   |  |  |  |
| Allowable Emissions _   | _ of   |  |  |
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |
| <ul><li>5. Method of Compliance:</li><li>6. Allowable Emissions Comment (Description)</li></ul> | on of Operating Method):                             |  |  |
|   |  |  |  |
| Allowable Emissions Allowable Emissions   | _of  |  |  |
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |
| 5. Method of Compliance:  |  |  |  |
| 6. Allowable Emissions Comment (Description   | on of Operating Method):                             |  |  |

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## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otential, Estimated Fugitive, and Dasenne & Frojected Actual Emissions |   |  |  |
|--|---|--|--|
| 1. Pollutant Emitted: SO2  | 2. Total Percent Efficiency of Control: |  |  |
| 3. Potential Emissions:  | 4. Synthetically Limited?               |  |  |
|  | I tons/year Yes X No                    |  |  |
| 5. Range of Estimated Fugitive Emissions (as                             | <u> </u>                                |  |  |
| to tons/year   | . пррпочотель.                          |  |  |
| 6. Emission Factor: 0.6 lb/MMscf   | . 7. Emissions                          |  |  |
|  | Method Code:                            |  |  |
| Reference: AP-42   | 3                                       |  |  |
| 8.a. Baseline Actual Emissions (if required):                            | 8.b. Baseline 24-month Period:          |  |  |
| tons/year  | From: To:                               |  |  |
| 9.a. Projected Actual Emissions (if required):                           | 9.b. Projected Monitoring Period:       |  |  |
| tons/year  | 5 years 10 years                        |  |  |
| 10. Calculation of Emissions:  |   |  |  |
| 10. Calculation of Emissions.  |   |  |  |
|  |   |  |  |
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|  |   |  |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:                   |   |  |  |
|  |   |  |  |
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|  |   |  |  |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| <b>Allowable Emissions</b> Allowable Emissions | of  |  |  |
|--|---|--|--|
| 1. Basis for Allowable Emissions Code:         | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. Allowable Emissions and Units:              | 4. Equivalent Allowable Emissions: 1b/hour tons/year  |  |  |
| 5. Method of Compliance:                       |   |  |  |
| 6. Allowable Emissions Comment (Descrip        | tion of Operating Method):                            |  |  |
|  |   |  |  |
| Allowable Emissions Allowable Emissions        | of  |  |  |
| 1. Basis for Allowable Emissions Code:         | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. Allowable Emissions and Units:              | 4. Equivalent Allowable Emissions: lb/hour tons/year  |  |  |
| 5. Method of Compliance:                       |   |  |  |
| 6. Allowable Emissions Comment (Descrip        | tion of Operating Method):                            |  |  |
| ·  |   |  |  |
|  |   |  |  |
| Allowable Emissions Allowable Emissions        | of  |  |  |
| Basis for Allowable Emissions Code:            | Future Effective Date of Allowable Emissions:         |  |  |
| 3. Allowable Emissions and Units:              | 4. Equivalent Allowable Emissions:  lb/hour tons/year |  |  |
| 5. Method of Compliance:                       |   |  |  |
| 6. Allowable Emissions Comment (Descrip        | tion of Operating Method):                            |  |  |
|  |   |  |  |

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POLLUTANT DETAIL INFORMATION
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## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1. Pollutant Emitted: PM/PM10/PM2.5                              | 2. Total Percent Efficiency of Control: |            | ency of Control:               |
|--|---|------------|--------------------------------|
| 3. Potential Emissions: lb/hour 454.4                            | tons/year                               |            | netically Limited?<br>Yes X No |
| 5. Range of Estimated Fugitive Emissions (as to tons/year        | s applicable):                          |            |                                |
| 6. Emission Factor: 0.125 lb/MMBtu  Reference: Allowable by rule |   |            | 7. Emissions Method Code: 0    |
| 8.a. Baseline Actual Emissions (if required):                    | 8.b. Baseline                           | 24-month   | Period:                        |
| tons/year  | From:                                   |            | To:                            |
| 9.a. Projected Actual Emissions (if required):                   | 9.b. Projected                          | d Monitori | ng Period:                     |
| tons/year  |   |            | 0 years                        |
| 10. Calculation of Emissions:                                    |   |            | ·                              |
| 11 Potential Fugitive and Actual Emissions C                     | omment:                                 |            |                                |
| 11. Potential, Fugitive, and Actual Emissions Comment:           |   |            |                                |
|  |   |            |                                |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

### Allowable Emissions Allowable Emissions 1 of 2

| A  | Ilowable Emissions Allowable Emissions I                          | . 01 <u>2</u>   |  |  |
|----|---|---|--|--|
| 1. | Basis for Allowable Emissions Code: RULE                          | Puture Effective Date of Allowable Emissions:         |  |  |
| 3. | Allowable Emissions and Units:  0.1 lb/MMBtu heat input           | 4. Equivalent Allowable Emissions:   lb/hour          |  |  |
| 5. | Method of Compliance: Stack Test                                  |   |  |  |
| 6. | Allowable Emissions Comment (Description During normal operation. | on of Operating Method):                              |  |  |
| Al | lowable Emissions Allowable Emissions 2                           | of <u>2</u>   |  |  |
| 1. | Basis for Allowable Emissions Code: RULE                          | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. | Allowable Emissions and Units:  0.3 lb/MMBtu heat input           | 4. Equivalent Allowable Emissions: lb/hour tons/year  |  |  |
| 5. | Method of Compliance: Stack Test                                  |   |  |  |
| 6. | Allowable Emissions Comment (Description                          | on of Operating Method):                              |  |  |
| Du | iring the 3 hours in any 24 hour period for bo                    | iler cleaning (sooth-blowing)/loading changing.       |  |  |
| Al | lowable Emissions Allowable Emissions                             | _ of  |  |  |
| 1. | Basis for Allowable Emissions Code:                               | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. | Allowable Emissions and Units:                                    | 4. Equivalent Allowable Emissions:  lb/hour tons/year |  |  |
| 5. | Method of Compliance:   |   |  |  |

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6. Allowable Emissions Comment (Description of Operating Method):

## POLLUTANT DETAIL INFORMATION Page [5] of [6]

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1. Pollutant Emitted: <b>VOC</b>                          | 2. Total Percent Efficiency of Control: |        |                             |
|---|---|--------|-----------------------------|
| 3. Potential Emissions:  lb/hour 19.2                     | 2 tons/year                             | -      | netically Limited? Yes X No |
| 5. Range of Estimated Fugitive Emissions (as to tons/year | applicable):                            |        |                             |
| 6. Emission Factor: 5.5 lb/MMscf  Reference: AP-42        |   |        | 7. Emissions Method Code:   |
|   | l                                       |        |                             |
| 8.a. Baseline Actual Emissions (if required):             | 8.b. Baseline 2                         |        |                             |
| tons/year   | From:                                   | 7      | Го:                         |
| 9.a. Projected Actual Emissions (if required):            | 9.b. Projected Monitoring Period:       |        | ng Period:                  |
| tons/year   | ☐ 5 year                                | rs 🔲 1 | 0 years                     |
| 10. Calculation of Emissions:                             |   |        |                             |
|   |   |        |                             |
| ·   |   |        | <u> </u>                    |
| 11. Potential, Fugitive, and Actual Emissions C           | omment:                                 |        |                             |

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### POLLUTANT DETAIL INFORMATION Page [5] of [6]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions | s of  |  |  |
|---|---|--|--|
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:              |  |  |
| 3. Allowable Emissions and Units:       | 4. Equivalent Allowable Emissions: lb/hour tons/year          |  |  |
| 5. Method of Compliance:                |   |  |  |
| 6. Allowable Emissions Comment (Descrip | otion of Operating Method):                                   |  |  |
| Allowable Emissions Allowable Emissions | s of  |  |  |
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:              |  |  |
| 3. Allowable Emissions and Units:       | 4. Equivalent Allowable Emissions: lb/hour tons/year          |  |  |
| 5. Method of Compliance:                |   |  |  |
| 6. Allowable Emissions Comment (Descrip | otion of Operating Method):                                   |  |  |
| Allowable Emissions Allowable Emissions | s of  |  |  |
| 1. Basis for Allowable Emissions Code:  | Emissions:  2. Future Effective Date of Allowable  Emissions: |  |  |
| 3. Allowable Emissions and Units:       | 4. Equivalent Allowable Emissions: lb/hour tons/year          |  |  |
| 5. Method of Compliance:                |   |  |  |
| 6. Allowable Emissions Comment (Descrip | otion of Operating Method):                                   |  |  |

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### POLLUTANT DETAIL INFORMATION Page [6] of [6]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otentian Estimated 1 agrerre, and Dasenne o             | e i rojectee rietuur Eimis              | SIONS              |  |
|---|---|--------------------|--|
| 1. Pollutant Emitted: Total HAPs                          | 2. Total Percent Efficiency of Control: |                    |  |
| 3. Potential Emissions:                                   | 4. Synth                                | netically Limited? |  |
|   | tons/year Y                             | es X No            |  |
|   |   |                    |  |
| 5. Range of Estimated Fugitive Emissions (as to tons/year | з аррпсавіе).                           |                    |  |
| 6. Emission Factor:                                       |   | 7. Emissions       |  |
|   |   | Method Code:       |  |
| Reference: AP-42/Boiler MACT                              |   | 3                  |  |
| 8.a. Baseline Actual Emissions (if required):             | 8.b. Baseline 24-month                  | Period:            |  |
| tons/year   | From:                                   | Го:                |  |
| 9.a. Projected Actual Emissions (if required):            | 9.b. Projected Monitori                 | ng Period:         |  |
| tons/year   | <u>.</u>                                | 0 years            |  |
| 10. Calculation of Emissions:                             |   |                    |  |
| 10. Guidantion of Emissions.                              | •                                       |                    |  |
|   |   |                    |  |
| ,   |   |                    |  |
|   |   | •                  |  |
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|   |   |                    |  |
| ·   |   |                    |  |
|   |   |                    |  |
| 11 D  |   |                    |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:    |   |                    |  |
|   |   |                    |  |
|   |   |                    |  |
| '   |   |                    |  |
|   |   |                    |  |

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# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable   | e Emissions of _    | <u> </u>   |  |  |
|---------------------------------|---------------------|--|--|--|
| 1. Basis for Allowable Emission | ns Code: 2.         | 2. Future Effective Date of Allowable Emissions:     |  |  |
| 3. Allowable Emissions and Un   | its: 4.             | Equivalent Allowable Emissions:<br>lb/hour tons/year |  |  |
| 5. Method of Compliance:        |                     |  |  |  |
| 6. Allowable Emissions Commo    |                     | Operating Method):                                   |  |  |
| Allowable Emissions Allowable   | Emissions of _      | <del>_</del>   |  |  |
| 1. Basis for Allowable Emission | ns Code: 2.         | Future Effective Date of Allowable Emissions:        |  |  |
| 3. Allowable Emissions and Un   | its: 4.             | Equivalent Allowable Emissions:<br>lb/hour_tons/year |  |  |
| 5. Method of Compliance:        |                     |  |  |  |
| 6. Allowable Emissions Commo    | ent (Description of | Operating Method):                                   |  |  |
| Allowable Emissions Allowable   | Emissions of _      |  |  |  |
| 1. Basis for Allowable Emission |                     | Future Effective Date of Allowable Emissions:        |  |  |
| 3. Allowable Emissions and Un   | its: 4.             | Equivalent Allowable Emissions:<br>lb/hour tons/year |  |  |
| 5. Method of Compliance:        | , ,                 |  |  |  |
| 6. Allowable Emissions Comme    | ent (Description of | Operating Method):                                   |  |  |

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### EMISSIONS UNIT INFORMATION Section [2] of [6]

188 MW Unit No. 2 Boiler

#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [2] of [6] 188 MW Unit No. 2 Boiler

#### A. GENERAL EMISSIONS UNIT INFORMATION

### Title V Air Operation Permit Emissions Unit Classification

| 1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.) |  |   |   |  |  |
|--|--|---|---|--|--|
| regulated emis   | The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. |   |   |  |  |
| The emissions unregulated en   |  | missions Unit Informati   | on Section is an                                  |  |  |
| <b>Emissions Unit Descr</b>  | iption and Status  |   |   |  |  |
| 1. Type of Emissions   | Unit Addressed in this   | Section: (Check one)  |   |  |  |
| single process   | or production unit, or ac  | ection addresses, as a sictivity, which produces of efinable emission point | one or more air                                   |  |  |
| of process or p  |  | vities which has at least   | e emissions unit, a group one definable emission  |  |  |
|  |  | on addresses, as a single<br>activities which produce                       | e emissions unit, one or fugitive emissions only. |  |  |
| <ol> <li>Description of Emissions Unit Addressed in this Section:</li> <li>188 MW Unit No. 2 Boiler</li> </ol>   |  |   |   |  |  |
| 3. Emissions Unit Ide  | entification Number: 00  | 2   |   |  |  |
| 4. Emissions Unit  | 5. Commence  | 6. Initial Startup  | 7. Emissions Unit                                 |  |  |
| Status Code:   | Construction Date:   | Date:   | Major Group SIC Code:                             |  |  |
| A  | Date.  | 09/01/64  | 49  |  |  |
| 8. Federal Program Applicability: (Check all that apply)   |  |   |   |  |  |
| X Acid Rain Unit   |  |   |   |  |  |
| X CAIR Unit  |  |   |   |  |  |
| 9. Package Unit: Combustion Engineering Steam Generator  |  |   |   |  |  |
| Manufacturer:  |  | Model Number:   |   |  |  |
| 10. Generator Namepl   | <del>-</del>   |   |   |  |  |
| 11. Emissions Unit Co  | mment:   |   |   |  |  |
|  |  |   |   |  |  |

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Section [2] of [6] 188 MW Unit No. 2 Boiler

| Emissions Unit Control Equipment/Method: Control of |
|---|
| 1. Control Equipment/Method Description:            |
|   |
|   |
|   |
| 2. Control Device or Method Code:                   |
| Emissions Unit Control Equipment/Method: Control of |
| 1. Control Equipment/Method Description:            |
|   |
|   |
| 2. Control Device or Method Code:                   |
| 2. Control Device or Method Code:                   |
| Emissions Unit Control Equipment/Method: Control of |
| 1. Control Equipment/Method Description:            |
|   |
|   |
| 2. Control Device or Method Code:                   |
| 2. Control Device of Method Code:                   |
| Emissions Unit Control Equipment/Method: Control of |
| 1. Control Equipment/Method Description:            |
|   |
|   |
|   |
| 2. Control Device or Method Code:                   |

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Section [2] of [6] 188 MW Unit No. 2 Boiler

#### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

#### **Emissions Unit Operating Capacity and Schedule**

| 1. | Maximum Process or Throughput Rate:                               |
|----|---|
| 2. | Maximum Production Rate:  |
| 3. | Maximum Heat Input Rate: 2,248.7 million Btu/hr                   |
| 4. | Maximum Incineration Rate: pounds/hr                              |
|    | tons/day  |
| 5. | Requested Maximum Operating Schedule:                             |
|    | 24 hours/day 7 days/week  |
|    | 52 weeks/year 8,400 hours/year                                    |
| 6. | Operating Capacity/Schedule Comment:                              |
| Th | e maximum heat input of 2,248.7 MMBtu/hr when firing natural gas. |

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Section [2] of [6] 188 MW Unit No. 2 Boiler

# C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

#### **Emission Point Description and Type**

| <u>CII</u> | iission Foint Description                               | <u>anu 1 ype</u>       |                              |                    |  |
|------------|---|------------------------|------------------------------|--------------------|--|
| 1.         | . Identification of Point on Plot Plan or Flow Diagram: |                        | 2. Emission Point Type Code: |                    |  |
| 3.         | Descriptions of Emission                                | Points Comprising      | this Emissions Unit:         | for VE Tracking:   |  |
|            |   |                        | •                            | -                  |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        | •                            |                    |  |
| 4          | ID Numbers or Descriptio                                | <br>ons of Emission Ur |                              | Point in Common.   |  |
| ••         | 12 Ivaliloois of Bescriptio                             | ns of Emission of      | itto with this Emission      | Tome in Common.    |  |
|            |   |                        |                              |                    |  |
| 5.         | Discharge Type Code:                                    | 6. Stack Height        | ::                           | 7. Exit Diameter:  |  |
|            | V   | 300 feet               |                              | <b>14</b> feet     |  |
| 8.         | Exit Temperature:                                       |                        | netric Flow Rate:            | 10. Water Vapor:   |  |
|            | <b>325</b> °F   | <b>795,323</b> acfm    |                              | %                  |  |
| 11.        | Maximum Dry Standard F dscfm                            | low Rate:              | 12. Nonstack Emissi feet     | on Point Height:   |  |
| 13.        | Emission Point UTM Coo                                  |                        |                              | Latitude/Longitude |  |
|            | Zone: 17 East (km):                                     | 521.5                  | Latitude (DD/MM/SS) 28/29/36 |                    |  |
|            | North (km)  |                        | Longitude (DD/N              | √IM/SS) 80/46/41   |  |
| 15.        | 15. Emission Point Comment:                             |                        |                              |                    |  |
| Boi        | ilers No. 1 and No. 2 share a                           | a common stack.        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |
|            |   |                        |                              |                    |  |

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Section [2] of [6] 188 MW Unit No. 2 Boiler

#### D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

| Segment Description (Process/Fuel Type):     Natural Gas |                    |              |    |                                   |
|--|--------------------|--------------|----|-----------------------------------|
|  |                    |              |    |                                   |
|  |                    |              |    |                                   |
| 2. Source Classification Code                            | e (SCC):           | 3. SCC Units |    | eet of Natural Gas Burned         |
| 4. Maximum Hourly Rate: 2.16                             | 5. Maximum         |              |    | Estimated Annual Activity Factor: |
| 7. Maximum % Sulfur:                                     | 8. Maximum         | % Ash:       | 9. | Million Btu per SCC Unit: 1041    |
| 10. Segment Comment:                                     |                    |              | _  |                                   |
|  |                    |              |    |                                   |
|  |                    |              |    |                                   |
| Segment Description and Ra                               | ite: Segment       | of           |    |                                   |
| 1. Segment Description (Prod                             | cess/Fuel Type):   |              |    |                                   |
| Residual fuel oil will no longer                         | be fired in this u | nit.         |    |                                   |
|  | `                  |              |    |                                   |
|  |                    |              |    |                                   |
| 2. Source Classification Code                            | e (SCC):           | 3. SCC Units | :  |                                   |
| 4. Maximum Hourly Rate:                                  | 5. Maximum         | Annual Rate: | 6. | Estimated Annual Activity Factor: |
| 7. Maximum % Sulfur:                                     | 8. Maximum         | % Ash:       | 9. | Million Btu per SCC Unit:         |
| 10. Segment Comment:                                     |                    |              |    |                                   |
|  |                    |              |    |                                   |
|  |                    |              |    |                                   |

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#### E. EMISSIONS UNIT POLLUTANTS

### List of Pollutants Emitted by Emissions Unit

| 1. Pollutant Emitted                    | 2. Primary Control | 3. Secondary Control | 4. Pollutant    |
|---|--------------------|----------------------|-----------------|
|   | Device Code        | Device Code          | Regulatory Code |
| NO <sub>x</sub>                         |                    | -                    |                 |
| СО                                      |                    |                      |                 |
| SO <sub>2</sub>                         |                    |                      |                 |
| PM/ PM <sub>10</sub> /PM <sub>2.5</sub> |                    |                      |                 |
| voc                                     | -                  |                      |                 |
| Total HAPs                              |                    |                      |                 |
| ·                                       |                    |                      |                 |
|   |                    |                      |                 |
|   |                    |                      |                 |
|   |                    |                      |                 |
|   |                    |                      |                 |
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|   |                    |                      |                 |
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|   |                    |                      |                 |
|   |                    |                      |                 |
|   |                    |                      |                 |

POLLUTANT DETAIL INFORMATION
Page [1] of [6]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otential, Estimated 1 agitive, and Dascinic C  | e i i ojectea / tetaai Emis |                           |  |
|--|-----------------------------|---------------------------|--|
| 1. Pollutant Emitted: NO <sub>x</sub>  | 2. Total Percent Efficient  | ency of Control:          |  |
| 3. Potential Emissions:  | 4. Synth                    | netically Limited?        |  |
|  | tons/year Y                 | es X No                   |  |
| 5. Range of Estimated Fugitive Emissions (as to tons/year  | applicable):                |                           |  |
| 6. Emission Factor: 0.198 lb/MMBtu   |                             | 7. Emissions Method Code: |  |
| Reference: Test Data   |                             | 1                         |  |
| 8.a. Baseline Actual Emissions (if required):  | 8.b. Baseline 24-month      | Period:                   |  |
| tons/year  | From:                       | To:                       |  |
| 9.a. Projected Actual Emissions (if required):   | 9.b. Projected Monitori     | ng Period:                |  |
| tons/year  |                             | 0 years                   |  |
| 10. Calculation of Emissions:  |                             | •                         |  |
|  |                             |                           |  |
|  |                             |                           |  |
| ·  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:   |                             |                           |  |
| and a second of the analysis of the second o |                             |                           |  |
|  |                             |                           |  |
|  |                             |                           |  |
|  | •                           |                           |  |

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Section [2] of [6] 188 MW Unit No. 2 Boiler

## POLLUTANT DETAIL INFORMATION Page [1] of [6]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions   | _of   |  |  |
|---|---|--|--|
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year  |  |  |
| 5. Method of Compliance:  | •   |  |  |
| 6. Allowable Emissions Comment (Description   | · · · · · · · · · · · · · · · · · · ·                 |  |  |
| Allowable Emissions Allowable Emissions   | _ of  |  |  |
| Basis for Allowable Emissions Code:   | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year  |  |  |
| <ul><li>5. Method of Compliance:</li><li>6. Allowable Emissions Comment (Description)</li></ul> | on of Operating Method):                              |  |  |
| Allowable Emissions Allowable Emissions   |   |  |  |
| 1. Basis for Allowable Emissions Code:  | Future Effective Date of Allowable Emissions:         |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions:  1b/hour tons/year |  |  |
| 5. Method of Compliance:  |   |  |  |
| 6. Allowable Emissions Comment (Description   | on of Operating Method):                              |  |  |

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#### **EMISSIONS UNIT INFORMATION** Section [2] of [6]

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188 MW Unit No. 2 Boiler

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential Estimated Eugitive and Raseline & Projected Actual Emissions

| Folential, Estimated rugitive, and Dasenne & Projected Actual Emissions |                          |                    |  |
|---|--------------------------|--------------------|--|
| Pollutant Emitted:     CO   | 2. Total Percent Efficie | ency of Control:   |  |
| 3. Potential Emissions:   | 4. Synth                 | netically Limited? |  |
|   | tons/year Y              | es X No            |  |
| 5. Range of Estimated Fugitive Emissions (as to tons/year               | s applicable):           |                    |  |
| 6. Emission Factor: 24 lb/MMscf   |                          | 7. Emissions       |  |
| Reference: AP-42  |                          | Method Code:       |  |
| 8.a. Baseline Actual Emissions (if required):                           | 8.b. Baseline 24-month   | Period:            |  |
| tons/year   | From:                    | Го:                |  |
| 9.a. Projected Actual Emissions (if required):                          | 9.b. Projected Monitori  | ng Period:         |  |
| tons/year   |                          | 0 years            |  |
| 10. Calculation of Emissions:   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:                  |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |
|   |                          |                    |  |

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# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| <u>All</u> | owable Emissions Allowable Emissions                            | oi <u> </u>  |
|------------|---|--|
| 1.         | Basis for Allowable Emissions Code:                             | Future Effective Date of Allowable Emissions:        |
| 3.         | Allowable Emissions and Units:                                  | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5.         | Method of Compliance:   |  |
|            | Allowable Emissions Comment (Description                        |  |
| <u>All</u> | owable Emissions Allowable Emissions                            | of   |
| 1.         | Basis for Allowable Emissions Code:                             | 2. Future Effective Date of Allowable Emissions:     |
| 3.         | Allowable Emissions and Units:                                  | 4. Equivalent Allowable Emissions: lb/hour tons/year |
|            | Method of Compliance:  Allowable Emissions Comment (Description | of Operating Method):                                |
|            |   |  |
| All        | owable Emissions Allowable Emissions                            | of   |
| 1.         | Basis for Allowable Emissions Code:                             | 2. Future Effective Date of Allowable Emissions:     |
| 3.         | Allowable Emissions and Units:                                  | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5.         | Method of Compliance:   |  |
| 6.         | Allowable Emissions Comment (Description                        | of Operating Method):                                |

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# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otential, Estimated 1 agriffe, and Basenne e            | VIIO COLOR II COLORIO                           |
|---|---|
| 1. Pollutant Emitted: SO2                                 | 2. Total Percent Efficiency of Control:         |
| 3. Potential Emissions: lb/hour 5.                        | 4. Synthetically Limited?  4 tons/year Yes X No |
|   | + tonsi y cui                                   |
| 5. Range of Estimated Fugitive Emissions (as to tons/year | s applicable):                                  |
| 6. Emission Factor: 0.6 lb/MMscf                          | 7. Emissions Method Code:                       |
| Reference: AP-42  | 3   |
| 8.a. Baseline Actual Emissions (if required):             | 8.b. Baseline 24-month Period:                  |
| tons/year   | From: To:                                       |
| 9.a. Projected Actual Emissions (if required):            | 9.b. Projected Monitoring Period:               |
| tons/year   | ☐ 5 years ☐ 10 years                            |
| 10. Calculation of Emissions:                             |   |
|   |   |
|   |   |
|   |   |
|   |   |
| ·   |   |
|   |   |
|   |   |
|   |   |
| ·   |   |
|   |   |
|   |   |
| 11. Potential, Fugitive, and Actual Emissions C           | omment:   |
| 11.1 otoman, 1 agin vo, and 1 total 2 moonone c           |   |
|   |   |
|   |   |
|   |   |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| <u>Al</u> | lowable Emissions Allowable Emissions    | of_  |   |
|-----------|--|------|---|
| 1.        | Basis for Allowable Emissions Code:      | 2.   | Future Effective Date of Allowable Emissions:     |
| 3.        | Allowable Emissions and Units:           | 4.   | Equivalent Allowable Emissions: lb/hour tons/year |
| 5.        | Method of Compliance:                    |      |   |
| 6.        | Allowable Emissions Comment (Description | of   | Operating Method):                                |
| <u>Al</u> | lowable Emissions Allowable Emissions    | of_  | <u> </u>  |
| 1.        | Basis for Allowable Emissions Code:      | 2.   | Future Effective Date of Allowable Emissions:     |
| 3.        | Allowable Emissions and Units:           | 4.   | Equivalent Allowable Emissions: lb/hour tons/year |
| 5.        | Method of Compliance:                    |      |   |
| 6.        | Allowable Emissions Comment (Description | of   | Operating Method):                                |
| <u>Al</u> | lowable Emissions Allowable Emissions    | of_  | <u></u>   |
| 1.        | Basis for Allowable Emissions Code:      | 2.   | Future Effective Date of Allowable Emissions:     |
| 3.        | Allowable Emissions and Units:           | 4.   | Equivalent Allowable Emissions: lb/hour tons/year |
| 5.        | Method of Compliance:                    |      |   |
| 6.        | Allowable Emissions Comment (Description | of ( | Operating Method):                                |

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## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1. Pollutant Emitted: PM/PM10/PM2.5                              | 2. Total Percent Effic | iency of Control:            |
|--|------------------------|------------------------------|
| 3. Potential Emissions:  lb/hour 1,180                           |                        | thetically Limited? Yes X No |
| 5. Range of Estimated Fugitive Emissions (as to tons/year        | s applicable):         |                              |
| 6. Emission Factor: 0.125 lb/MMBtu  Reference: Allowable by rule |                        | 7. Emissions Method Code: 0  |
| 8.a. Baseline Actual Emissions (if required):                    | 8.b. Baseline 24-mont  | n Period:                    |
| tons/year  |                        | To:                          |
| 9.a. Projected Actual Emissions (if required):                   | 9.b. Projected Monitor | ring Period:                 |
| tons/year  | •                      | 10 years                     |
| 10. Calculation of Emissions:                                    |                        |                              |
| 11 Potential, Fugitive, and Actual Emissions Co                  | omment:                |                              |
| 11. Potential, Fugitive, and Actual Emissions Co                 | omment:                |                              |
|  |                        |                              |

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### POLLUTANT DETAIL INFORMATION Page [4] of [6]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

#### Allowable Emissions 1 of 2

| Basis for Allowable Emissions Code:     RULE  | Future Effective Date of Allowable Emissions:        |
|---|--|
| 3. Allowable Emissions and Units: 0.1 lb/MMBtu heat input                                     | 4. Equivalent Allowable Emissions:    Ib/hour        |
| 5. Method of Compliance: Stack Test   |  |
| 6. Allowable Emissions Comment (Description During normal operation.                          | n of Operating Method):                              |
| Allowable Emissions Allowable Emissions 2   | of <u>2</u>  |
| Basis for Allowable Emissions Code:     RULE  | 2. Future Effective Date of Allowable Emissions:     |
| Allowable Emissions and Units:     0.3 lb/MMBtu heat input                                    | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance: Stack Test   |  |
| 6. Allowable Emissions Comment (Description During the 3 hours in any 24 hour period for boil | •  |
| Allowable Emissions Allowable Emissions   | of   |
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:     |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:  |  |
| 6. Allowable Emissions Comment (Description   | n of Operating Method):                              |

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# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| Totalian Estimated Lagitive, and Dasenine e               |                            | <del></del> _      |
|---|----------------------------|--------------------|
| 1. Pollutant Emitted: <b>VOC</b>                          | 2. Total Percent Efficient | ency of Control:   |
| 3. Potential Emissions:                                   | 4. Syntl                   | hetically Limited? |
|   |                            | es X No            |
| 5. Range of Estimated Fugitive Emissions (as to tons/year | s applicable):             |                    |
| 6. Emission Factor: 5.5 lb/MMscf                          |                            | 7. Emissions       |
| Reference: AP-42  |                            | Method Code:<br>3  |
| 8.a. Baseline Actual Emissions (if required):             | 8.b. Baseline 24-month     | Period:            |
| tons/year   | From:                      | Го:                |
| 9.a. Projected Actual Emissions (if required):            | 9.b. Projected Monitori    | ing Period:        |
| tons/year   |                            | 0 years            |
| 10. Calculation of Emissions:                             |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
| 11. Potential, Fugitive, and Actual Emissions Co          | omment:                    |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |
|   |                            |                    |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions     | of   |
|---|--|
| 1. Basis for Allowable Emissions Code:      | 2. Future Effective Date of Allowable Emissions:     |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:                    |  |
| 6. Allowable Emissions Comment (Description |  |
| Allowable Emissions Allowable Emissions     | of   |
| 1. Basis for Allowable Emissions Code:      | 2. Future Effective Date of Allowable Emissions:     |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:                    |  |
| 6. Allowable Emissions Comment (Description | n of Operating Method):                              |
| Allowable Emissions Allowable Emissions     | of   |
| 1. Basis for Allowable Emissions Code:      | 2. Future Effective Date of Allowable Emissions:     |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:                    | -  |
| 6. Allowable Emissions Comment (Description | of Operating Method):                                |

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# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| Pollutant Emitted:  Total HAPs                            | 2. Total Percent Efficie | ency of Control:               |
|---|--------------------------|--------------------------------|
| 3. Potential Emissions: lb/hour 17.2                      | 1                        | hetically Limited?<br>Yes X No |
| 5. Range of Estimated Fugitive Emissions (as to tons/year | applicable):             |                                |
| 6. Emission Factor:  Reference: AP-42/Boiler MACT         |                          | 7. Emissions Method Code: 3    |
| 8.a. Baseline Actual Emissions (if required):             | 8.b. Baseline 24-month   | Period                         |
| tons/year   |                          | Го:                            |
| 9.a. Projected Actual Emissions (if required):            | 9.b. Projected Monitori  |                                |
| tons/year   | <del>-</del>             | 0 years                        |
| 10. Calculation of Emissions:                             |                          |                                |
| 11. Potential, Fugitive, and Actual Emissions Co          | omment:                  | `                              |
| 11. Potential, Fugitive, and Actual Emissions Co          | omment:                  |                                |
|   | ·                        |                                |

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### POLLUTANT DETAIL INFORMATION Page [6] of [6]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions                         | of  |
|---|---|
| Basis for Allowable Emissions Code:         | Future Effective Date of Allowable Emissions:         |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year  |
| 5. Method of Compliance:                    |   |
| 6. Allowable Emissions Comment (Description |   |
| Allowable Emissions                         |   |
| Basis for Allowable Emissions Code:         | 2. Future Effective Date of Allowable Emissions:      |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year  |
| 5. Method of Compliance:                    |   |
| 6. Allowable Emissions Comment (Description | n of Operating Method):                               |
| Allowable Emissions Allowable Emissions     | of  |
| Basis for Allowable Emissions Code:         | 2. Future Effective Date of Allowable Emissions:      |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions:  lb/hour tons/year |
| 5. Method of Compliance:                    |   |
| 6. Allowable Emissions Comment (Description | n of Operating Method):                               |

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#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application — Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [3] of [6] 328 MW Unit No. 3 Boiler

#### A. GENERAL EMISSIONS UNIT INFORMATION

#### Title V Air Operation Permit Emissions Unit Classification

| 1. Regulated or Unregulated Emissions Unit or renewal Title V air operation permit. S permit or FESOP only.)   |                           | •                 |
|--|---------------------------|-------------------|
| <ul> <li>The emissions unit addressed in the regulated emissions unit.</li> <li>The emissions unit addressed in this Eunregulated emissions unit.</li> </ul> |                           |                   |
| Emissions Unit Description and Status  |                           |                   |
| 1. Type of Emissions Unit Addressed in this  | Section: (Check one)      |                   |
| X This Emissions Unit Information S  |                           | •                 |
| single process or production unit, or ac<br>pollutants and which has at least one d  |                           |                   |
| ☐ This Emissions Unit Information Secti<br>of process or production units and acti<br>point (stack or vent) but may also prod                                | vities which has at least |                   |
| This Emissions Unit Information Section more process or production units and a   | ,                         | •                 |
| 2. Description of Emissions Unit Addressed 328 MW Unit No. 3 Boiler  | in this Section:          |                   |
| 3. Emissions Unit Identification Number: 00  | 3                         |                   |
| 4. Emissions Unit 5. Commence  | 6. Initial Startup        | 7. Emissions Unit |
| Status Code: Construction  | Date:                     | Major Group       |
| A Date:  | 02/01/74                  | SIC Code:         |
| 8. Federal Program Applicability: (Check al.   | I that apply)             |                   |
| X Acid Rain Unit   |                           |                   |
| X CAIR Unit  |                           |                   |
| 9. Package Unit: Combustion Engineering St   |                           |                   |
| Manufacturer:  | Model Number:             |                   |
| 10. Generator Nameplate Rating: 328 MW   |                           |                   |
| 11. Emissions Unit Comment:  |                           |                   |

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| Emissions Unit Control Equipment/Method: Control of |
|---|
| 1. Control Equipment/Method Description:            |
|   |
|   |
|   |
| 2. Control Device or Method Code:                   |
| Emissions Unit Control Equipment/Method: Control of |
| 1. Control Equipment/Method Description:            |
|   |
|   |
|   |
| 2. Control Device or Method Code:                   |
| Emissions Unit Control Equipment/Method: Control of |
| 1. Control Equipment/Method Description:            |
|   |
|   |
|   |
| 2. Control Device or Method Code:                   |
| Emissions Unit Control Equipment/Method: Control of |
| 1. Control Equipment/Method Description:            |
|   |
|   |
|   |
| 2. Control Device or Method Code:                   |

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#### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

#### **Emissions Unit Operating Capacity and Schedule**

|    | Maximum Process or Throughput Rate:                               |                  |
|----|---|------------------|
| 2. | Maximum Production Rate:  | -                |
| 3. | Maximum Heat Input Rate: 3,208.5 million Btu/hr                   |                  |
| 4. | Maximum Incineration Rate: pounds/hr                              |                  |
|    | tons/day  |                  |
| 5. | Requested Maximum Operating Schedule:                             |                  |
|    | 24 hours/day  | 7 days/week      |
|    | <b>52</b> weeks/year  | 8,400 hours/year |
| 6. | Operating Capacity/Schedule Comment:                              |                  |
| Th | e maximum heat input of 3,208.5 MMBtu/hr when firing natural gas. |                  |

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# C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

#### **Emission Point Description and Type**

| Emission Four Description and Type |  |                      |                                       |                    |
|------------------------------------|--|----------------------|---------------------------------------|--------------------|
| 1.                                 | Identification of Point on Plot Plan or        |                      | 2. Emission Point Type Code:          |                    |
|                                    | Flow Diagram:                                  |                      | 1                                     |                    |
| 3                                  | Descriptions of Emission Points Comprising the |                      | this Emissions Unit                   | for VE Tracking    |
| ٥.                                 | Descriptions of Emission                       | i omis comprisme     | 5 timo minosiono o me                 | ioi (E muonang.    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    | `  |                      |                                       | 5                  |
| <b>4</b> .                         | ID Numbers or Descriptio                       | ns of Emission Ur    | nits with this Emission               | n Point in Common: |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  | <u> </u>             |                                       |                    |
| 5.                                 | Discharge Type Code:                           | 6. Stack Height      | :                                     | 7. Exit Diameter:  |
|                                    | V  | <b>300</b> feet      |                                       | <b>14.1</b> feet   |
| 8.                                 | Exit Temperature:                              | 9. Actual Volur      | netric Flow Rate:                     | 10. Water Vapor:   |
|                                    | <b>340</b> °F                                  | <b>1,004,045</b> acf | m                                     | %                  |
| 11.                                | Maximum Dry Standard F                         | low Rate:            | 12. Nonstack Emission Point Height:   |                    |
|                                    | dscfm  | 10 // 1440.          | feet                                  | · · ·              |
| 12                                 |  | .1                   |                                       | -4:4d-/I:4d-       |
| 13.                                | Emission Point UTM Coo                         |                      | 14. Emission Point Latitude/Longitude |                    |
|                                    | Zone: 17 East (km):                            | 521.5                | Latitude (DD/MM/SS) 28/29/36          |                    |
|                                    | North (km)                                     | : 3151.7             | Longitude (DD/N                       | MM/SS) 80/46/41    |
| 15.                                | <b>Emission Point Comment:</b>                 |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      | •                                     |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    | •  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |
|                                    |  |                      |                                       |                    |

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#### D. SEGMENT (PROCESS/FUEL) INFORMATION

#### Segment Description and Rate: Segment 1 of 1

| Segment Description (Process/Fuel Type):     Natural Gas |   |             |                           |    |                                   |
|--|---|-------------|---------------------------|----|-----------------------------------|
|  |   |             |                           |    |                                   |
| 2. Source Cl<br>1-01-006-0                               | assification Code                                       | e (SCC):    | 3. SCC Units: Million Cub |    | eet of Natural Gas Burned         |
| 4. Maximum 3.08  | Hourly Rate:  | 5. Maximum  | Annual Rate:              | 6. | Estimated Annual Activity Factor: |
| 7. Maximum   | % Sulfur:   | 8. Maximum  | % Ash:                    | 9. | Million Btu per SCC Unit: 1041    |
| 10. Segment (  | Comment:  |             | _                         |    |                                   |
|  |   |             |                           |    |                                   |
|  |   |             |                           |    |                                   |
| Segment Des  | cription and Ra   | te: Segment | of                        |    |                                   |
| 1. Segment I   | 1. Segment Description (Process/Fuel Type):             |             |                           |    |                                   |
| Residual fuel o  | Residual fuel oil will no longer be fired in this unit. |             |                           |    |                                   |
|  |   |             |                           |    |                                   |
|  |   |             |                           |    |                                   |
| 2. Source Cla  | assification Code                                       | e (SCC):    | 3. SCC Units:             |    |                                   |
| 4. Maximum   | Hourly Rate:  | 5. Maximum  | Annual Rate:              | 6. | Estimated Annual Activity Factor: |
| 7. Maximum   | % Sulfur:   | 8. Maximum  | % Ash:                    | 9. | Million Btu per SCC Unit:         |
| 10. Segment Comment:                                     |   |             |                           |    |                                   |
|  |   |             |                           |    |                                   |
|  |   |             |                           |    |                                   |

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#### E. EMISSIONS UNIT POLLUTANTS

#### List of Pollutants Emitted by Emissions Unit

| 1. Pollutant Emitted                    | 2. Primary Control<br>Device Code | 3. Secondary Control<br>Device Code | 4. Pollutant Regulatory Code |
|---|-----------------------------------|-------------------------------------|------------------------------|
|   | Device Code                       | Device Code                         | Regulatory Code              |
| NO <sub>x</sub>                         |                                   |                                     |                              |
| СО                                      | _                                 |                                     |                              |
| SO <sub>2</sub>                         |                                   |                                     | -                            |
| PM/ PM <sub>10</sub> /PM <sub>2.5</sub> |                                   |                                     |                              |
| voc                                     | -                                 |                                     |                              |
| Total HAPs                              |                                   |                                     |                              |
|   |                                   | _                                   |                              |
|   |                                   |                                     |                              |
|   |                                   |                                     | _                            |
|   |                                   |                                     |                              |
|   |                                   |                                     |                              |
|   |                                   |                                     |                              |
|   |                                   |                                     |                              |
|   |                                   |                                     |                              |
|   |                                   |                                     | _                            |
|   |                                   |                                     | _                            |
|   |                                   |                                     |                              |
|   |                                   |                                     |                              |

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POLLUTANT DETAIL INFORMATION
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# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| I Otential, Estimated Fugitive, and Dasenne                            | E I Tojecteu Actual Emissions                       |  |
|--|---|--|
| 1. Pollutant Emitted: NO <sub>x</sub>                                  | 2. Total Percent Efficiency of Control:             |  |
| 3. Potential Emissions: lb/hour 2,66                                   | 4. Synthetically Limited?  8 tons/year Yes X No     |  |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year |   |  |
| 6. Emission Factor: 0.198 lb/MMBtu  Reference: Test Data               | 7. Emissions Method Code:  1                        |  |
| 8.a. Baseline Actual Emissions (if required):                          | 8.b. Baseline 24-month Period:                      |  |
| tons/year  | From: To:   |  |
| 9.a. Projected Actual Emissions (if required): tons/year               | 9.b. Projected Monitoring Period:  5 years 10 years |  |
| tons/year 5 years 10 years 10. Calculation of Emissions:               |   |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:                 |   |  |
|  | _   |  |

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# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions of  |  |  |  |  |
|---|--|--|--|--|
| 1. Basis for Allowable Emissions Code:                            | Future Effective Date of Allowable Emissions:        |  |  |  |
| 3. Allowable Emissions and Units:                                 | 4. Equivalent Allowable Emissions:   lb/hour         |  |  |  |
| 5. Method of Compliance:  |  |  |  |  |
| 6. Allowable Emissions Comment (Description of Operating Method): |  |  |  |  |
| Allowable Emissions   | _ of   |  |  |  |
| 1. Basis for Allowable Emissions Code:                            | Future Effective Date of Allowable Emissions:        |  |  |  |
| 3. Allowable Emissions and Units:                                 | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |  |
| 5. Method of Compliance:  |  |  |  |  |
| 6. Allowable Emissions Comment (Description of Operating Method): |  |  |  |  |
| Allowable Emissions Allowable Emissions of                        |  |  |  |  |
| 1. Basis for Allowable Emissions Code:                            | 2. Future Effective Date of Allowable Emissions:     |  |  |  |
| 3. Allowable Emissions and Units:                                 | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |  |
| 5. Method of Compliance:  |  |  |  |  |
| 6. Allowable Emissions Comment (Descriptio                        | on of Operating Method):                             |  |  |  |

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#### POLLUTANT DETAIL INFORMATION Page |2| of [6]

#### F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otential, Estimated Fugitive, and Dasenne              | t 110 jecteu Metuai Eliiissions                 |  |  |
|--|---|--|--|
| 1. Pollutant Emitted: CO                                 | 2. Total Percent Efficiency of Control:         |  |  |
| 3. Potential Emissions: lb/hour 310.                     | 4. Synthetically Limited?  7 tons/year Yes X No |  |  |
| 5. Range of Estimated Fugitive Emissions (a to tons/year | s applicable):                                  |  |  |
| 6. Emission Factor: 24 lb/MMscf  Reference: AP-42        | 7. Emissions Method Code: 3                     |  |  |
| 8.a. Baseline Actual Emissions (if required):            | 8.b. Baseline 24-month Period:                  |  |  |
| , •  |   |  |  |
| tons/year  | From: To:                                       |  |  |
| 9.a. Projected Actual Emissions (if required):           | 9.b. Projected Monitoring Period:               |  |  |
| tons/year  | 5 years 10 years                                |  |  |
| 10. Calculation of Emissions:                            |   |  |  |
|  | omment:   |  |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:   |   |  |  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |

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## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions   | of  |
|---|---|
| 1. Basis for Allowable Emissions Code:  | Future Effective Date of Allowable Emissions:         |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions:  lb/hour tons/year |
| 5. Method of Compliance:  |   |
| 6. Allowable Emissions Comment (Description of the Comment of the |   |
| Allowable Emissions Allowable Emissions   |   |
| Basis for Allowable Emissions Code:   | 2. Future Effective Date of Allowable Emissions:      |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year  |
| 5. Method of Compliance:  |   |
| 6. Allowable Emissions Comment (Descripti   | on of Operating Method):                              |
| Allowable Emissions Allowable Emissions   | of  |
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:      |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year  |
| 5. Method of Compliance:  | •   |
| 6. Allowable Emissions Comment (Descripti   | on of Operating Method):                              |

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POLLUTANT DETAIL INFORMATION
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## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otential, Estimated 1 agitive, and Dasenne of                        | t I i ojecteu i ictuai Emma | <u> </u>                  |  |  |
|--|-----------------------------|---------------------------|--|--|
| 1. Pollutant Emitted: SO2  | 2. Total Percent Efficie    | ency of Control:          |  |  |
| 3. Potential Emissions:  | 4. Synth                    | etically Limited?         |  |  |
|  | s tons/year                 | es X No                   |  |  |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year |                             |                           |  |  |
| 6. Emission Factor: 0.6 lb/MMscf                                       |                             | 7. Emissions Method Code: |  |  |
| Reference: AP-42   | 1010111111                  | 3                         |  |  |
| 8.a. Baseline Actual Emissions (if required):                          | 8.b. Baseline 24-month      | Period:                   |  |  |
| tons/year  | From: T                     | o:                        |  |  |
| 9.a. Projected Actual Emissions (if required):                         | 9.b. Projected Monitoria    | ng Period:                |  |  |
| tons/year  | □ 5 years □ 10              | 0 years                   |  |  |
| 10. Calculation of Emissions:  | <u> </u>                    |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:                 |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |
|  |                             |                           |  |  |

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### POLLUTANT DETAIL INFORMATION Page [3] of [6]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emiss                               | ions oi  |  |  |  |
|---|--|--|--|--|
| Basis for Allowable Emissions Code                                | 2. Future Effective Date of Allowable Emissions:     |  |  |  |
| 3. Allowable Emissions and Units:                                 | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |  |
| 5. Method of Compliance:  |  |  |  |  |
| 6. Allowable Emissions Comment (Des                               |  |  |  |  |
| Allowable Emissions Allowable Emissi                              |  |  |  |  |
| Basis for Allowable Emissions Code                                | 2. Future Effective Date of Allowable Emissions:     |  |  |  |
| 3. Allowable Emissions and Units:                                 | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |  |
| 5. Method of Compliance:  |  |  |  |  |
| 6. Allowable Emissions Comment (Description of Operating Method): |  |  |  |  |
| Allowable Emissions Allowable Emissi                              | ions of  |  |  |  |
| 1. Basis for Allowable Emissions Code                             | 2. Future Effective Date of Allowable Emissions:     |  |  |  |
| 3. Allowable Emissions and Units:                                 | 4. Equivalent Allowable Emissions: lb/hour tons/year |  |  |  |
| 5. Method of Compliance:  | · ·  |  |  |  |
| 6. Allowable Emissions Comment (Des                               | cription of Operating Method):                       |  |  |  |

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# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| Totential, Estimated Fugitive, and Daschite of                         |   |  |  |
|--|---|--|--|
| 1. Pollutant Emitted: PM/PM10/PM2.5                                    | 2. Total Percent Efficiency of Control: |  |  |
| 3. Potential Emissions:  | 4. Synthetically Limited?               |  |  |
|  | tons/year Yes X No                      |  |  |
| 5. Range of Estimated Fugitive Emissions (as applicable): to tons/year |   |  |  |
| 6. Emission Factor: 0.125 lb/MMBtu                                     | 7. Emissions                            |  |  |
| Reference: Allowable by rule   | Method Code:<br>0                       |  |  |
| 8.a. Baseline Actual Emissions (if required):                          | 8.b. Baseline 24-month Period:          |  |  |
| tons/year  | From: To:                               |  |  |
| 9.a. Projected Actual Emissions (if required):                         | 9.b. Projected Monitoring Period:       |  |  |
| tons/year  | 5 years 10 years                        |  |  |
| 10. Calculation of Emissions:  |   |  |  |
| 11. Potential, Fugitive, and Actual Emissions Comment:                 |   |  |  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |

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# POLLUTANT DETAIL INFORMATION Page [4] of [6]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emiss | sions Allow | able Emis | sions 1 | of 2 | 2 |
|-----------------|-------------|-----------|---------|------|---|
|-----------------|-------------|-----------|---------|------|---|

| Basis for Allowable Emissions Code:     RULE  | 2. Future Effective Date of Allowable Emissions:      |  |  |
|---|---|--|--|
| 3. Allowable Emissions and Units: 0.1 lb/MMBtu heat input   | 4. Equivalent Allowable Emissions: lb/hour tons/year  |  |  |
| 5. Method of Compliance: Stack Test   | ,   |  |  |
| 6. Allowable Emissions Comment (Description During normal operation.  | n of Operating Method):                               |  |  |
| Allowable Emissions 2   | of <u>2</u>   |  |  |
| Basis for Allowable Emissions Code:     RULE  | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. Allowable Emissions and Units: 0.3 lb/MMBtu heat input   | 4. Equivalent Allowable Emissions:  lb/hour tons/year |  |  |
| 5. Method of Compliance: Stack Test   |   |  |  |
| 6. Allowable Emissions Comment (Description of Operating Method):  During the 3 hours in any 24 hour period for boiler cleaning (sooth-blowing)/loading changing. |   |  |  |
| Allowable Emissions Allowable Emissions   | _of   |  |  |
| 1. Basis for Allowable Emissions Code:  | 2. Future Effective Date of Allowable Emissions:      |  |  |
| 3. Allowable Emissions and Units:   | 4. Equivalent Allowable Emissions: lb/hour tons/year  |  |  |
| 5. Method of Compliance:  |   |  |  |
| 6. Allowable Emissions Comment (Description   | n of Operating Method):                               |  |  |

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#### **EMISSIONS UNIT INFORMATION** Section [3] of [6]

POLLUTANT DETAIL INFORMATION Page [5] of [6]

328 MW Unit No. 3 Boiler

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

## Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1 otentian, Estimated I agitive, and Daseine o                                 | • 1 1 0 1 0 0 0 0 0 1 1 0 0 0 0 0 1 |                    |
|--|---|--------------------|
| 1. Pollutant Emitted: <b>VOC</b>   | 2. Total Percent Efficient  | ency of Control:   |
| 3. Potential Emissions:  | 4. Synth  | netically Limited? |
|  | tons/year Y   | es X No            |
| 5. Range of Estimated Fugitive Emissions (as to tons/year                      | s applicable):  |                    |
| 6. Emission Factor: 5.5 lb/MMscf   |   | 7. Emissions       |
| Reference: AP-42   |   | Method Code:       |
| 8.a. Baseline Actual Emissions (if required):                                  | 8.b. Baseline 24-month  | Period:            |
| tons/year  | From:   | To:                |
| 9.a. Projected Actual Emissions (if required):                                 | 9.b. Projected Monitori   | ng Period:         |
| tons/year  | 5 years 1   | 0 years            |
| 10. Calculation of Emissions:  11. Potential Engitive and Actual Emissions Co. | omment  |                    |
| 11. Potential, Fugitive, and Actual Emissions Co                               | omment:   |                    |

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# EMISSIONS UNIT INFORMATION Section [3] of [6] 328 MW Unit No. 3 Boiler

# POLLUTANT DETAIL INFORMATION Page |5| of |6|

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# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| Allowable Emissions Allowable Emissions     | _ of   |
|---|--|
| 1. Basis for Allowable Emissions Code:      | Future Effective Date of Allowable Emissions:        |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:                    |  |
| 6. Allowable Emissions Comment (Description |  |
| Allowable Emissions Allowable Emissions     | _ of   |
| Basis for Allowable Emissions Code:         | 2. Future Effective Date of Allowable Emissions:     |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:                    |  |
| 6. Allowable Emissions Comment (Description | on of Operating Method):                             |
| Allowable Emissions Allowable Emissions     | _ of   |
| 1. Basis for Allowable Emissions Code:      | 2. Future Effective Date of Allowable Emissions:     |
| 3. Allowable Emissions and Units:           | 4. Equivalent Allowable Emissions: lb/hour tons/year |
| 5. Method of Compliance:                    | ,  |
| 6. Allowable Emissions Comment (Description | on of Operating Method):                             |

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## EMISSIONS UNIT INFORMATION Section [3] of [6] 328 MW Unit No. 3 Boiler

POLLUTANT DETAIL INFORMATION
Page [6] of [6]

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# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

| 1. Pollutant Emitted: Total HAPs                          | 2. Total Perce | ent Efficie | ency of Control:          |
|---|----------------|-------------|---------------------------|
| 3. Potential Emissions:                                   |                | 4. Synth    | netically Limited?        |
|   | 6 tons/year    | □ Y         | es X No                   |
| 5. Range of Estimated Fugitive Emissions (as to tons/year | applicable):   |             |                           |
| 6. Emission Factor:                                       |                |             | 7. Emissions Method Code: |
| Reference: AP-42/Boiler MACT                              |                |             | 3                         |
| 8.a. Baseline Actual Emissions (if required):             | 8.b. Baseline  | 24-month    | Period:                   |
| tons/year   | From:          | 7           | Го:                       |
| 9.a. Projected Actual Emissions (if required):            | 9.b. Projected | Monitori    | ng Period:                |
| tons/year   |                | rs 🔲 1      | 0 years                   |
| 10. Calculation of Emissions:                             |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |
| 11. Potential, Fugitive, and Actual Emissions C           | omment:        |             |                           |
|   |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |
|   |                |             |                           |

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## EMISSIONS UNIT INFORMATION Section [3] of [6] 328 MW Unit No. 3 Boiler

POLLUTANT DETAIL INFORMATION
Page [6] of [6]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

| <u>Al</u> | <b>lowable Emissions</b> Allowable Emissions | of_  | _   |
|-----------|--|------|---|
| 1.        | Basis for Allowable Emissions Code:          | 2.   | Future Effective Date of Allowable Emissions:     |
| 3.        | Allowable Emissions and Units:               | 4.   | Equivalent Allowable Emissions: lb/hour tons/year |
| 5.        | Method of Compliance:                        |      |   |
| 6.        | Allowable Emissions Comment (Description     | of ( | Operating Method):                                |
| <u>Al</u> | lowable Emissions Allowable Emissions        | of_  | _   |
| 1.        | Basis for Allowable Emissions Code:          | 2.   | Future Effective Date of Allowable Emissions:     |
| 3.        | Allowable Emissions and Units:               | 4.   | Equivalent Allowable Emissions: lb/hour tons/year |
| 5.        | Method of Compliance:                        |      |   |
| 6.        | Allowable Emissions Comment (Description     | of ( | Operating Method):                                |
| <u>Al</u> | lowable Emissions Allowable Emissions        | of_  | _   |
| 1.        | Basis for Allowable Emissions Code:          | 2.   | Future Effective Date of Allowable Emissions:     |
| 3.        | Allowable Emissions and Units:               | 4.   | Equivalent Allowable Emissions: lb/hour tons/year |
| 5.        | Method of Compliance:                        | •    |   |
| 6.        | Allowable Emissions Comment (Description     | of ( | Operating Method):                                |

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EMISSIONS UNIT INFORMATION Section [4] of [6] Storage Tanks

#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [4] Storage Tanks

of [6]

# A. GENERAL EMISSIONS UNIT INFORMATION

# Title V Air Operation Permit Emissions Unit Classification

| _  |  |                           |  |                          |  |
|----|--|---------------------------|--|--------------------------|--|
| 1. | Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)  |                           |  |                          |  |
|    | ☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.   |                           |  |                          |  |
|    | The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.  |                           |  |                          |  |
| Er | nissions Unit Desci  | ription and Status        |  |                          |  |
| 1. | Type of Emissions  | Unit Addressed in this    | Section: (Check one)                               |                          |  |
|    |  |                           | on addresses, as a single                          | -                        |  |
|    | • •  | •                         | ctivity, which produces of                         |                          |  |
|    |  |                           | efinable emission point                            | •                        |  |
|    |  |                           | ection addresses, as a sind activities which has a |                          |  |
|    | •  | -                         | also produce fugitive en                           |                          |  |
|    | ☐ This Emissions   | s Unit Information Secti  | on addresses, as a single                          | e emissions unit, one or |  |
|    |  |                           |  | fugitive emissions only. |  |
| 2. | 2. Description of Emissions Unit Addressed in this Section:  |                           |  |                          |  |
|    | <ul> <li>Emission unit 009 permitted under Permit No. 0090196-013-AV consists of:</li> <li>Two No. 6 Fuel Oil Storage Tanks, each with a capacity of 3.67 million gallons;</li> <li>One No. 6 Fuel Oil Storage Tank with a capacity of 7.5 million gallons;</li> <li>One No. 2 Fuel Oil Storage Tank with a capacity of 34,500 gallons;</li> <li>One Gasoline Fuel Storage "Day" Tank with a capacity of 500 gallons; and</li> <li>Fuel loading and unloading activities.</li> </ul> |                           |  |                          |  |
| 3. |  | entification Number: 00   | 9  |                          |  |
| 4. |  | 5. Commence               | 6. Initial Startup                                 | 7. Emissions Unit        |  |
| A  | Status Code:   | Construction Date:        | Date:  | Major Group<br>SIC Code: |  |
|    |  | Zuic.                     |  | 49                       |  |
| 8. | Federal Program A  | Applicability: (Check all | that apply)  |                          |  |
|    | Acid Rain Uni  | t                         |  |                          |  |
|    | CAIR Unit  |                           |  |                          |  |
| 9. | Package Unit:  |                           |  |                          |  |
|    | Manufacturer:  |                           | Model Number:                                      |                          |  |
| 10 | 10. Generator Nameplate Rating:  |                           |  |                          |  |

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### 11. Emissions Unit Comment:

### PROPOSED CHANGE (TITLE V PERMIT - INSIGNIFICANT ACTIVITIES CORRECTION)

The unregulated emission units and activities (EU009) at the RRI Indian River Plant (IRP) as well as those (EU009) at the OUC IRP were not included as an emission unit in the original Title V permit. However, in the last renewal permit, they were identified as EU009. By identifying these unregulated units and activities as an emissions unit unnecessarily requires consideration and effort for calculating emissions in the Annual Operating Report.

OUC requests that EU009 Unregulated Emission Units and Activities from both permits be removed from the Title V Permit as a numbered emission unit and included in a list format in Appendix I-1, List of Insignificant Emissions Units and Activities.

## **RRI IRP**

- Two (2) 3.67 million gallon No. 6 Fuel Oil storage tanks
- One (1) 7.5 million gallon No. 6 Fuel Oil storage tank
- One (1) 500 gallon gasoline fuel storage "dry" tank
- Miscellaneous fuel loading and unloading activities

### **OUC IRP**

One 150,000 gallon No. 2 fuel oil tank

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EMISSIONS UNIT INFORMATION Section [5] of [6] 235 HP Diesel Fuel Engine

### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [5] of [6] 235 HP Diesel Fuel Engine

## A. GENERAL EMISSIONS UNIT INFORMATION

# Title V Air Operation Permit Emissions Unit Classification

| 1.          | or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.) |  |                           |                           |  |
|-------------|--|--|---------------------------|---------------------------|--|
|             | <b>X</b> The emissions unit addressed in this Emissions Unit Information Section is a regulated                    |  |                           |                           |  |
|             | emissions unit.  | unit addressed in this E   | nissions Unit Information | on Section is an          |  |
|             | unregulated emissions unit.  |  |                           |                           |  |
| <u>En</u>   | nissions Unit Descr  | iption and Status  |                           |                           |  |
| 1.          | Type of Emissions  | Unit Addressed in this   | Section: (Check one)      |                           |  |
|             |  | ions Unit Information Sor production unit, or ac   | •                         | , i                       |  |
|             | pollutants and   | which has at least one do  | efinable emission point   | (stack or vent).          |  |
|             |  | SUnit Information Section Section Units and activities are activities and activities and activities are activities activiti |                           | e emissions unit, a group |  |
|             |  | vent) but may also prod  |                           | one definable emission    |  |
|             | ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or                            |  |                           |                           |  |
|             | more process or production units and activities which produce fugitive emissions only.                             |  |                           |                           |  |
| 2.          | 2. Description of Emissions Unit Addressed in this Section:  |  |                           |                           |  |
| Or          | ne 235 HP Diesel Fue   | el Engine  |                           |                           |  |
| 3.          | Emissions Unit Ide   | entification Number: TE  | D                         |                           |  |
| 4.          | Emissions Unit   | 5. Commence  | 6. Initial Startup        | 7. Emissions Unit         |  |
| A           | Status Code:   | Construction Date:   | Date:                     | Major Group<br>SIC Code:  |  |
| 1           |  | Dato.  | 1964                      | 49                        |  |
| 8.          | Federal Program A  | pplicability: (Check all   | that apply)               |                           |  |
|             | ☐ Acid Rain Unit   | İ.   |                           |                           |  |
|             | CAIR Unit  |  |                           |                           |  |
| 9.          | Package Unit:  |  |                           |                           |  |
| 1.0         | Manufacturer: Cat  | •  | Model Number:             | D343A                     |  |
| <u> 10.</u> | 10. Generator Nameplate Rating:  |  |                           |                           |  |

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#### 11. Emissions Unit Comment:

The engine is subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60, Subpart IIII or Subpart JJJJ, due to their age.

The 235 HP engine is an emergency engine, and so would be subject to the following requirements:

- Change oil and oil filter every 500 hours of operation or annually (whichever comes first).
- Inspect air filter every 1,000 hours of operation or annually (whichever comes first) and replace as necessary.
- Inspect all hoses and belts every 500 hours of operation or annually (whichever comes first) and replace as necessary.
- Minimize time spent in idle and minimize startup time to less than 30 minutes.
- Install a non-resettable hour meter (if one isn't already installed).

Section [5] of [6] 235 HP Diesel Fuel Engine

| Emissions Unit Control Equipment/Method: Control of                                    |
|--|
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
| Emissions Unit Control Equipment/Method: Control of                                    |
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
| Emissions Unit Control Equipment/Method: Control of                                    |
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
| 2. Control Device or Method Code:  Emissions Unit Control Equipment/Method: Control of |
|  |
| Emissions Unit Control Equipment/Method: Control of                                    |
| Emissions Unit Control Equipment/Method: Control of                                    |
| Emissions Unit Control Equipment/Method: Control of                                    |

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Section [5] of [6] 235 HP Diesel Fuel Engine

# **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

# **Emissions Unit Operating Capacity and Schedule**

| 1. Maximum Process or Throughput Rate: |   |                            |  |  |
|--|---|----------------------------|--|--|
| 2.                                     | Maximum Production Rate:                                    |                            |  |  |
| 3.                                     | Maximum Heat Input Rate:                                    | •                          |  |  |
| 4.                                     | Maximum Incineration Rate: pounds/hr                        |                            |  |  |
|  | tons/day  |                            |  |  |
| 5.                                     | Requested Maximum Operating Schedule:                       |                            |  |  |
|  | 24 hours/day  | 7 days/week                |  |  |
|  | <b>52</b> weeks/year  | <100 hours/year            |  |  |
| 6.                                     | Operating Capacity/Schedule Comment:                        |                            |  |  |
| An                                     | nual operating hours (and basis) <100 hr/yr (maintenance ch | ecks & readiness testing). |  |  |

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# C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

# **Emission Point Description and Type**

| 1.  | Identification of Point on Flow Diagram:                    | Plot Plan or         | 2.    | Emission Point 7        | Type Code:  |
|-----|---|----------------------|-------|-------------------------|---|
| 3.  | Descriptions of Emission                                    | Points Comprising    | thi   | s Emissions Unit        | for VE Tracking:  |
| 4.  | ID Numbers or Descriptio                                    | ns of Emission Ur    | its v | with this Emission      | 1 Point in Common:  |
| 5.  | Discharge Type Code:  | 6. Stack Height feet | :     |                         | 7. Exit Diameter: feet  |
| 8.  | Exit Temperature: °F  | 9. Actual Volumacfm  | netr  | ic Flow Rate:           | 10. Water Vapor: %  |
| 11. | Maximum Dry Standard F<br>dscfm                             | low Rate:            | 12.   | Nonstack Emissi<br>feet | on Point Height:  |
| 13. | Emission Point UTM Coo<br>Zone: 17 East (km):<br>North (km) | 521.5                | 14.   | Latitude (DD/M)         | Latitude/Longitude<br>M/SS) <b>28/29/36</b><br>MM/SS) <b>80/46/41</b> |
| 15. | Emission Point Comment:                                     |                      |       |                         |   |

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# D. SEGMENT (PROCESS/FUEL) INFORMATION

# Segment Description and Rate: Segment 1 of 1

| Segment Description (Process/Fuel Type):     Diesel |                     |                                 |                                   |  |  |
|---|---------------------|---------------------------------|-----------------------------------|--|--|
| 2. Source Classification Cod 3-04-900-35            | e (SCC): 3. SC      | C Units:<br><b>Gallons Bu</b> i | ned                               |  |  |
| 4. Maximum Hourly Rate:                             | 5. Maximum Annual I | Rate: 6.                        | Estimated Annual Activity Factor: |  |  |
| 7. Maximum % Sulfur:                                | 8. Maximum % Ash:   | 9.                              | Million Btu per SCC Unit:         |  |  |
| 10. Segment Comment:                                |                     |                                 |                                   |  |  |
| Segment Description and Ra                          | ite: Segment _ of   |                                 |                                   |  |  |
| 1. Segment Description (Prod                        | cess/Fuel Type):    |                                 |                                   |  |  |
| 2. Source Classification Cod                        | e (SCC): 3. SC      | C Units:                        |                                   |  |  |
| 4. Maximum Hourly Rate:                             | 5. Maximum Annual I | Rate: 6.                        | Estimated Annual Activity Factor: |  |  |
| 7. Maximum % Sulfur:                                | 8. Maximum % Ash:   | 9.                              | Million Btu per SCC Unit:         |  |  |
| 10. Segment Comment:                                |                     |                                 |                                   |  |  |

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## EMISSIONS UNIT INFORMATION Section [6] of [6] 800 HP Diesel Fuel Engines

#### III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction pennitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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Section [6] of [6] 800 HP Diesel Fuel Engines

## A. GENERAL EMISSIONS UNIT INFORMATION

# Title V Air Operation Permit Emissions Unit Classification

| 1.                          | 1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.) |                          |   |  |  |  |  |  |
|-----------------------------|--|--------------------------|---|--|--|--|--|--|
|                             | <b>X</b> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.  |                          |   |  |  |  |  |  |
|                             | ☐ The emissions unregulated en   |                          | Emissions Unit Informa  | tion Section is an                                   |  |  |  |  |
| <u>Er</u>                   | <u>nissions Unit Desci</u>   | ription and Status       |   |  |  |  |  |  |
| 1.                          | Type of Emissions  | Unit Addressed in this   | Section: (Check one)  |  |  |  |  |  |
|                             | single process   | or production unit, or a | ion addresses, as a sing<br>ctivity, which produces<br>definable emission poin  | one or more air                                      |  |  |  |  |
|                             | group of proce   | ss or production units a | Section addresses, as a sand activities which has a larger also produce fugitive of   | at least one definable                               |  |  |  |  |
|                             |  |                          | •   | le emissions unit, one or e fugitive emissions only. |  |  |  |  |
| 2.                          | Description of Em  | issions Unit Addressed   | in this Section:  |  |  |  |  |  |
| Τv                          | vo 800 HP Diesel Fu  | el Engines               |   |  |  |  |  |  |
| 3.                          | Emissions Unit Ide   | entification Number: T   | BD  |  |  |  |  |  |
| 4.                          | Emissions Unit   | 5. Commence              | 6. Initial Startup  | 7. Emissions Unit                                    |  |  |  |  |
| $\mathbf{A}$                | Status Code:   | Construction Date:       | Date:   | Major Group<br>SIC Code:                             |  |  |  |  |
|                             |  |                          | 1990  | 49   |  |  |  |  |
| 8.                          | Federal Program A  | pplicability: (Check a   | ll that apply)  |  |  |  |  |  |
|                             | ☐ Acid Rain Unit   | t                        |   |  |  |  |  |  |
|                             | CAIR Unit  |                          |   |  |  |  |  |  |
| 9.                          | 9. Package Unit: Manufacturer: Detroit Diesel Model Number: 12V-71   |                          |   |  |  |  |  |  |
|                             | 10. Generator Nameplate Rating:  |                          |   |  |  |  |  |  |
| 11. Emissions Unit Comment: |  |                          |   |  |  |  |  |  |
|                             |  |                          | These engines are subject to 40 CFR 63, Subpart ZZZZ, but not subject to 40 CFR 60, Subpart IIII or Subpart JJJJ, due to their age. |  |  |  |  |  |
|                             | Subpart IIII or Subpart JJJJ, due to their age.  The two 800 HP engines are limited use (<100 hr/yr), and so would only be subject to  |                          |   |  |  |  |  |  |

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Section [6] of [6] 800 HP Diesel Fuel Engines

| Emissions Unit Control Equipment/Method: Control of  |
|--|
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
| Emissions Unit Control Equipment/Method: Control of  |
| 1. Control Equipment/Method Description:   |
|  |
|  |
|  |
| 2. Control Device or Method Code:  |
|  |
| Emissions Unit Control Equipment/Method: Control of  |
| 1. Control Equipment/Method: Control of   1. Control Equipment/Method Description:   |
|  |
|  |
| 1. Control Equipment/Method Description:   |
|  |
| 1. Control Equipment/Method Description:   |
| Control Equipment/Method Description:     Control Device or Method Code:   |
| Control Equipment/Method Description:      Control Device or Method Code:      Emissions Unit Control Equipment/Method: Control of |
| Control Equipment/Method Description:      Control Device or Method Code:      Emissions Unit Control Equipment/Method: Control of |
| Control Equipment/Method Description:      Control Device or Method Code:      Emissions Unit Control Equipment/Method: Control of |

Section [6] of [6] 800 HP Diesel Fuel Engines

# B. EMISSIONS UNIT CAPACITY INFORMATION (Optional for unregulated emissions units.)

# **Emissions Unit Operating Capacity and Schedule**

| 1.   | Maximum Process or Throughput Rate:   |               |  |  |
|--|---------------------------------------|---------------|--|--|
| 2.   | Maximum Production Rate:              |               |  |  |
| 3.   | Maximum Heat Input Rate:              |               |  |  |
| 4.   | Maximum Incineration Rate: pounds/hr  |               |  |  |
|  | tons/day                              |               |  |  |
| 5.   | Requested Maximum Operating Schedule: |               |  |  |
|  | <b>24</b> hours/day                   | 7 days/week   |  |  |
|  | 52 weeks/year                         | 20 hours/year |  |  |
| 6.   | Operating Capacity/Schedule Comment:  |               |  |  |
| Annual operating hours (and basis) 20 hr/yr (estimate based on prior 3 years operation). |                                       |               |  |  |

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# C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

# **Emission Point Description and Type**

|                | ntification of Point on I w Diagram:              |                      | 2.     | Emission Point 7        | Type Code:  |
|----------------|---|----------------------|--------|-------------------------|---|
| 3. Des         | scriptions of Emission                            | Points Comprising    | thi:   | s Emissions Unit        | for VE Tracking:  |
| 4. ID          | Numbers or Descriptio                             | ns of Emission Ur    | nits v | with this Emission      | n Point in Common:  |
| 5. Dis         | charge Type Code:                                 | 6. Stack Height feet | :      |                         | 7. Exit Diameter: feet  |
| 8. Exi         | t Temperature:                                    | 9. Actual Volumacfm  | netr   | ic Flow Rate:           | 10. Water Vapor: %  |
| 11. Max<br>dsc | ximum Dry Standard F<br>efm                       | low Rate:            | 12.    | Nonstack Emissi<br>feet | on Point Height:  |
|                | ission Point UTM Coone: 17 East (km):  North (km) | 521.5                | 14.    | Latitude (DD/MI         | Latitude/Longitude<br>M/SS) <b>28/29/36</b><br>MM/SS) <b>80/46/41</b> |
| 15. Em         | ission Point Comment:                             |                      |        |                         |   |

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# D. SEGMENT (PROCESS/FUEL) INFORMATION

# Segment Description and Rate: Segment 1 of 1

|          | 0 in iii (n                |         | ( m )                                 |               |    |                           |  |  |
|----------|----------------------------|---------|---------------------------------------|---------------|----|---------------------------|--|--|
| 1.       | <b>5</b> 1 ( <b>51</b> )   |         |                                       |               |    |                           |  |  |
|          | Diesel                     |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
| 2.       | Source Classification Code | e (SCC  | C):                                   | 3. SCC Units: |    |                           |  |  |
|          | 3-04-900-35                | 1       |                                       | Gallons Bu    |    |                           |  |  |
| 4.       | Maximum Hourly Rate:       | 5. N    | Maximum A                             | Annual Rate:  | 6. | Estimated Annual Activity |  |  |
|          |                            |         |                                       |               |    | Factor:                   |  |  |
| 7.       | Maximum % Sulfur:          | 8. N    | Maximum (                             | % Ash:        | 9. | Million Btu per SCC Unit: |  |  |
|          |                            |         | •                                     |               |    | •                         |  |  |
| 10       | . Segment Comment:         | _       |                                       |               |    | •                         |  |  |
| 10.      | . Segment Comment.         |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
| Sa       | amont Description and De   |         | aamant                                | of            |    |                           |  |  |
|          | gment Description and Ra   |         |                                       | <u> </u>      |    |                           |  |  |
| 1.       | Segment Description (Prod  | cess/Fu | uel Type):                            |               |    | ·                         |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         | •                                     |               |    |                           |  |  |
| 2.       | Source Classification Code | e (SCC  | C):                                   | 3. SCC Units: |    |                           |  |  |
|          |                            | •       | ,                                     |               |    |                           |  |  |
| 1        | Maximum Hourly Rate:       | 5. N    | Aavimum                               | Annual Rate:  | 6  | Estimated Annual Activity |  |  |
| <b>-</b> | Maximum Mourry Rate.       | J. IV   | viaxiiiiuiii A                        | Ailluai Naic. | 0. | Factor:                   |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
| 7.       | Maximum % Sulfur:          | 8. N    | Aaximum (                             | % Ash:        | 9. | Million Btu per SCC Unit: |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
| 10       | Segment Comment:           |         | · · · · · · · · · · · · · · · · · · · |               | ·  |                           |  |  |
| •••      | Segment Comment.           | •       |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |
|          |                            |         |                                       |               |    |                           |  |  |

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ATTACHMENT IRP-FI-ACID

ACID RAIN PART APPLICATION (DEP FORM NO. 62-210.900(1)(A))

# Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

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| This submission is:           | ☐ New | Revised | <b>X</b> R | enewal |                 |
|-------------------------------|-------|---------|------------|--------|-----------------|
| Plant name Indian River Plant |       |         |            | State  | ORIS/Plant Code |

STEP 2 Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

STEP 1

Identify the source by plant name,

state, and ORIS or plant code.

If unit a SO<sub>2</sub> Opt-in unit, enter "yes" in column "b".

For new units or SO<sub>2</sub> Opt-in units, enter the requested information in columns "d" and "e."

| а        | Ф                                  | С  | d  | е   |
|----------|------------------------------------|--|--|---|
| Unit ID# | SO₂ Opt-in<br>Unit?<br>(Yes or No) | Unit will hold allowances in accordance with 40 CFR 72.9(c)(1) | New or SO <sub>2</sub> Opt-in<br>Units<br>Commence<br>Operation Date | New or SO <sub>2</sub> Opt-in Units  Monitor Certification Deadline |
| 001      |                                    | Yes  |  |   |
| 002      |                                    | Yes  |  |   |
| 003      |                                    | Yes  |  |   |
| XXC      |                                    | Yes  |  |   |
| XXD      |                                    | Yes  |  |   |
|          |                                    | Yeş  |  |   |

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#### STEP 3

Read the standard requirements.

#### Acid Rain Part Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
  - (ii) Have an Acid Rain Part.

#### Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain
- (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
- (4) For applications including a SO₂ Opt-in unit, a monitoring plan for each SO₂ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

#### Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

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STEP 3. Continued. Plant Name (from STEP 1) Indian River Plant

#### Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

#### Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act,

#### Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4 For SO<sub>2</sub> Opt-in units only.

In column "f" enter the unit ID# for every SO<sub>2</sub> Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

| f        | g                                  | h (not required for renewal application)                                      |
|----------|------------------------------------|---|
| Unit ID# | Description of the combustion unit | Number of hours unit operated in the six months preceding initial application |
|          |                                    |   |
|          |                                    |   |
|          |                                    |   |
|          |                                    |   |
|          |                                    |   |
|          |                                    |   |
|          |                                    |   |

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#### STEP 5

For SO<sub>2</sub> Opt-in units only. (Not required for SO<sub>2</sub> Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO<sub>2</sub> Opt-in unit identified in column "a" (and in column "f").

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

|   | i        | j  | k<br>  | l  | m   | n  |
|---|----------|--|--|--|---|--|
| • | Unit ID# | Baseline or Alternative<br>Baseline under<br>40 CFR 74.20<br>(mmBtu) | Actual SO₂<br>Emissions Rate<br>under<br>40 CFR 74.22<br>(lbs/mmBtu) | Allowable 1985<br>SO <sub>2</sub> Emissions<br>Rate under<br>40 CFR 74.23<br>(lbs/mmBtu) | Current Allowable SO <sub>2</sub> Emissions Rate under 40 CFR 74.24 (lbs/mmBtu) | Current<br>Promulgated<br>SO₂ Emissions<br>Rate under<br>40 CFR 74.25<br>(lbs/mmBtu) |
|   |          |  |  |  |   |  |
|   |          |  |  |  |   |  |
|   |          |  |  |  |   |  |
|   |          |  |  |  |   |  |
|   |          |  |  |  |   |  |
| ۱ |          |  |  |  |   |  |
|   |          |  |  |  |   |  |
|   |          |  |  |  |   |  |

#### STEP 6

For SO<sub>2</sub> Opt-in units only.

Attach additional requirements, certify and sign.

- A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
- B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
- C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
- D. Attach a complete compliance plan for SO<sub>2</sub> under 40 CFR 72.40.
- E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
- F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

## STEP 7

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

| Signature  | Date                   |
|--|------------------------|
| Certification (for designated representative or alternate designated | d representative only) |

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Name Jan C. Aspuru                   |                         | Title Vice Pr | esider | nt of Power Resources |
|--------------------------------------|-------------------------|---------------|--------|-----------------------|
| Owner Company Name Orlando Utilities | Commission              | 1             |        |                       |
| Phone (407) 658-6444                 | E-mail address <b>j</b> | jaspuru@oud   | c.com  |                       |
| Signature                            |                         |               | Date   | 5/24/12               |
| <del></del>                          | <del>/</del>            |               |        | · · ·                 |

DEP Form No. 62-210.900(1)(a) - Form

Effective: 3/16/08

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ATTACHMENT IRP-FI-CAIR

CAIR PART (DEP FORM NO. 62-210.900(1)(B))

# Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

|  | This submission is:            | ☐ Revised <b>X</b> Ren | ewal              |                             |
|--|--------------------------------|------------------------|-------------------|-----------------------------|
| STEP 1  Identify the source by plant name and ORIS or EIA plant code | Plant Name: Indian River Plant |                        | State:<br>Florida | ORIS or EIA Plant Code: 683 |

### STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

| _ |          |   |   |   |                              |                           |
|---|----------|---|---|---|------------------------------|---------------------------|
|   | а        | b   | С   | d   | e                            | f                         |
| ŀ | _        | Unit will<br>hold nitrogen<br>oxides (NO <sub>x</sub> ) | Unit will<br>hold sulfur<br>dioxide (SO₂) | Unit will<br>hold NO <sub>x</sub> Ozone<br>Season | New Units                    | New Units                 |
|   |          | allowances in accordance                                | allowances<br>in accordance               | allowances in accordance                          | Expected<br>Commence         | Expected<br>Monitor       |
|   | Unit ID# | with 40 CFR<br>96.106(c)(1)                             | with 40 CFR<br>96.206(c)(1)               | with 40 CFR<br>96.306(c)(1)                       | Commercial<br>Operation Date | Certification<br>Deadline |
|   | 001      | X   | Х   | X   |                              |                           |
|   | 002      | X   | Х   | Х   |                              |                           |
| ľ | 003      | X   | Х   | Х   |                              |                           |
| ľ | Α        | x   | Х   | x   |                              |                           |
|   | В        | x   | Х   | х   |                              |                           |
|   | xxc      | х   | Х   | х   | -                            |                           |
|   | XXD      | Х   | Х   | Х   |                              |                           |
| ļ |          |   |   |   |                              |                           |
|   |          |   |   |   |                              |                           |
| - |          |   |   |   |                              |                           |
| _ |          |   |   |   |                              |                           |
|   |          |   |   |   |                              | _                         |
| _ |          |   |   |   |                              |                           |
| L |          |   |   |   |                              |                           |
| L |          |   |   |   |                              |                           |
| L |          |   |   |   |                              |                           |
|   |          |   |   |   |                              |                           |

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#### STEP 3

Read the standard requirements.

#### CAIR NO ANNUAL TRADING PROGRAM

#### CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR  $NO_X$  source and each CAIR  $NO_X$  unit at the source shall:
  - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and

    (ii) IReserved!:
- (2) The owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part

#### Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>X</sub> source and each CAIR NO<sub>X</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO<sub>X</sub> source with the following CAIR NO<sub>X</sub> Emissions Requirements.

#### NO<sub>x</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR  $NO_x$  source and each CAIR  $NO_x$  unit at the source shall hold, in the source's compliance account, CAIR  $NO_x$  allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total  $NO_x$  emissions for the control period from all CAIR  $NO_x$  units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under paragraph (1) of the NO<sub>x</sub> Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>x</sub> Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO<sub>X</sub> allowance is a limited authorization to emit one ton of NO<sub>X</sub> in accordance with the CAIR NO<sub>X</sub> Annual Trading Program. No provision of the CAIR NO<sub>X</sub> Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO<sub>x</sub> unit.

### Excess Emissions Requirements.

- If a CAIR NO<sub>x</sub> source emits NO<sub>x</sub> during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:
- (1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>X</sub> source and each CAIR NO<sub>X</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
- (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO<sub>X</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR  $NO_X$  Annual Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

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#### STEP 3, Continued

#### Liability.

- (1) Each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
- (2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> source or the CAIR designated representative of a CAIR

NO<sub>X</sub> source shall also apply to the owners and operators of such source and of the CAIR NO<sub>X</sub> units at the source.

(3) Any provision of the CAIR NO<sub>X</sub> Annual Trading Program that applies to a CAIR NO<sub>X</sub> unit or the CAIR designated representative of a CAIR NO<sub>X</sub> unit shall also apply to the owners and operators of such unit.

#### Effect on Other Authorities.

No provision of the CAIR  $NO_X$  Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR  $NO_X$  source or CAIR  $NO_X$  unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

#### CAIR SO<sub>2</sub> TRADING PROGRAM

#### CAIR Part Requirements.

- The CAIR designated representative of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall:

   Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
   (ii) [Reserved];
- (2) The owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

### Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO₂ source and each SO₂ CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96 ,Subpart HHH, and Rule 62-296.470, F.A.C.
 (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine

compliance by each CAIR SO<sub>2</sub> source with the following CAIR SO<sub>2</sub> Emission Requirements.

#### SO<sub>2</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR  $SO_2$  source and each CAIR  $SO_2$  unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR  $SO_2$  allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR  $SO_2$  units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR  $SO_2$  allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the  $SO_2$  Emission Requirements, for a control period in a calendar year before the year for which the CAIR  $SO_2$  allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO<sub>2</sub> unit.

#### Excess Emissions Requirements.

If a CAIR SO<sub>2</sub> source emits SO<sub>2</sub> during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

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- (1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

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### STEP 3, Continued

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.
- (i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO<sub>2</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96. Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO<sub>2</sub> Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR SO<sub>2</sub> Trading Program.
- (2) The CAIR designated representative of a CAIR SO2 source and each CAIR SO2 unit at the source shall submit the reports required under the CAIR SO2 Trading Program, including those under 40 CFR Part 96, Subpart HHH.

#### Liability.

- (1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.
- (2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and of the CAIR SO<sub>2</sub> units at the source.
- (3) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.

#### Effect on Other Authorities.

No provision of the CAIR SO<sub>2</sub> Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

#### CAIR NO, OZONE SEASON TRADING PROGRAM

#### CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source
  - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
- The owners and operators of each CAIR NO<sub>x</sub> Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO<sub>X</sub> Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

#### Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296 470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO<sub>x</sub> Ozone Season source with the following CAIR NO<sub>x</sub> Ozone Season Emissions Requirements.

#### NO<sub>x</sub> Ozone Season Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
- (2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
- (3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>x</sub> Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was
- (4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
- (5) A CAIR  $NO_X$  Ozone Season allowance is a limited authorization to emit one ton of  $NO_X$  in accordance with the CAIR  $NO_X$  Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO<sub>X</sub> Ozone Season unit.

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#### STEP 3, Continued

#### Excess Emissions Requirements.

If a CAIR  $NO_X$  Ozone Season source emits  $NO_X$  during any control period in excess of the CAIR  $NO_X$  Ozone Season emissions limitation, then: (1) The owners and operators of the source and each CAIR  $NO_X$  Ozone Season unit at the source shall surrender the CAIR  $NO_X$  Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
- (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>X</sub> Ozone Season Trading Program.
- (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>X</sub> Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>X</sub> Ozone Season Trading Program.
- (2) The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

#### Liability.

- (1) Each CAIR NO<sub>X</sub> Ozone Season source and each CAIR NO<sub>X</sub> Ozone Season unit shall meet the requirements of the CAIR NO<sub>X</sub> Ozone Season Trading Program.
- (2) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season source or the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> Ozone Season units at the source.
- (3) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season unit or the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

#### Effect on Other Authorities

No provision of the CAIR  $NO_X$  Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR  $NO_X$  Ozone Season source or CAIR  $NO_X$  Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

#### STEP 4

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

#### Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| Name Jan C. Aspuru |  |              | Vice President o | Title        |    |
|--------------------|--|--------------|------------------|--------------|----|
|                    | Owner Name <b>Orlando Utilities Commissi</b> o |              | Company          |              |    |
|                    | Phone <b>(407) 658-6444</b>                    | mail Address | jaspuru@ouc.c    | om           | E- |
|                    | Signature                                      |              |                  | Date 5/24/12 |    |

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ATTACHMENT IRP-FI-TV6
REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

## SECTION III. EMISSIONS UNITS'AND SPECIFIC CONDITIONS.

#### Subsection C. Common Conditions for Emissions Units 004, 005, 006 and 007

Subsection C. The specific conditions in this section apply to the following emissions units:

| EU No. | Brief Description                        |
|--------|--|
| 004    | 35 MW Simple Cycle Combustion Turbine A  |
| 005    | 129 MW Simple Cycle Combustion Turbine C |
| 006    | 129 MW Simple Cycle Combustion Turbine D |
| 007    | 35 MW Simple Cycle Combustion Turbine B  |

#### Federal Regulations

C.1. NSPS Subpart GG. These emissions units are subject to all applicable requirements of NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. [PSD-FL-130 and PSD-FL-173]

### **Excess Emissions**

- C.2. Excess Emissions Permitted. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- C.3. Excess Emissions Permitted. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- C.4. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- C.5. Excess Emissions Defined. For the purpose of reports required under 40 CFR 60.7, periods of excess emissions that shall be reported are defined as follows:
  - a. Nitrogen oxides. Anyone-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
  - b. *Sulfur dioxide*. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.3 percent.

[40 CFR 60.334; PSD-FL-130 and PSD-FL-173]

#### **Monitoring of Operations**

C.6. CAM Plan. These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297 .310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-21 3.440(I)(b) 1.a., F.A.C.]

## **Continuous Monitoring Requirements**

C.7. COMS for Periodic Monitoring. OUC shall have installed continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. OUC shall maintain and operate the COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. [Rule 62 213.440, F.A.C., and applicant request]

#### APPENDIX I

#### LIST OF INSIGNIFICANT EMISSION UNITS AND/OR ACTIVITIES

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., <u>Categorical Exemptions</u>, or that meet the criteria specified in Rule 62-210.300(3)(b)1, F.A.C., <u>Generic Emission Unit Exemption</u>, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that the exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

### Brief Description of Emissions Units and/or Activities formerly under Permit No. 0090008-05-AV

1. Two 800 horsepower (HP) internal combustion diesel engines. The Detroit Diesel engines are each listed as a 12V-71 model, consisting of 12 cylinders at 71 cubic inches per cylinder. The inservice date for both of these units was August 1, 1990. Based on these factors, the units are not Subject to 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) or 40 CFR Subpart JJJJ, Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines. These are the only diesel generators in use at the site. These units are subject to 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. However, since the engines being operated meet Subpart ZZZZ definition of "existing units", there are no unit specific applicable requirements that must be met pursuant to this rule at this time.

#### Brief Description of Emissions Units and/or Activities formerly under Permit No. 0090196-013-AV

- 1. Fuel oil tanks, 1, 2 and 3 (No.6 fuel oil)
- 2. Light oil tanks 1 and 2 and fuel pump (No.2 diesel)
- 3. Emergency Generator\*

\*The Indian River Plant has only one generator or engine: a 175 kilowatt (at 1800 revolutions per minute) Caterpillar D343A diesel fired emergency generator. This emergency generator was manufactured in 1964 and has a displacement of approximately 14.6 liters (based on a bore of 5.4 inches and a stroke of 6.5 inches for the 6-cylinder engine). This emergency generator is an existing unit and there is no ongoing installation or construction associated with the generator.

This emergency generator is subject to regulations under 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. However, since the engine meets the Subpart ZZZZ definition of "existing units", there are no unit specific applicable requirements that must be met pursuant to this rule at this time.

#### **Brief Description of Emissions Units and/or Activities**

- Two (2) 3.67 million gallon No. 6 Fuel Oil storage tanks
- One (1) 7.5 million gallon No. 6 Fuel Oil storage tank
- One (1) 500 gallon gasoline fuel storage "dry" tank
- Miscellaneous fuel loading and unloading activities
- One 150,000 gallon No. 2 fuel oil tank

**ATTACHMENT 2** 



delivered locally

# BEST AVAILABLE RETROFIT TECHNOLOGY

# REVISED EXEMPTION MODELING ANALYSIS FOR INDIAN RIVER PLANT

**Orlando Utilities Commission** 

Prepared For: Orlando Utilities Commission

100 West Anderson Street, Reliable Plaza

Orlando, FL 32801

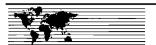
Submitted By: Golder Associates Inc.

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May 2012 123-87564





May 2012

123-87564

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### 1.0 INTRODUCTION

Orlando Utilities Commission (OUC) owns and operates the Indian River Power Plant (the Plant) on US Highway 1, south of Titusville, Florida. The Indian River Power Plant is a fuel-burning power plant that generates electricity through steam-driven turbines with boilers utilizing No. 6 fuel oil, No. 2 fuel oil, on-specifications used oil, propane, and natural gas as fuels. The Plant also has combustion turbines that generate electricity.

1

The BART-eligible emissions units at the Indian River Power Plant are Boiler Unit No. 2 and Boiler Unit No. 3. The other emission units at the Plant are not subject to the BART regulations.

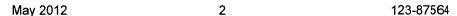
A Best Available Retrofit Technology (BART) exemption modeling analysis for the BART-eligible emissions units (i.e., Unit No. 2 and Unit No. 3) was previously submitted to the Florida Department of Environmental Protection (FDEP) in 2007 which included only particulate matter (PM) emissions and demonstrated that no further BART evaluations were needed to comply with the BART regulations. At that time, Reliant Energy Indian River, LLC owned Unit No. 2 and Unit No. 3 at the Plant and subsequently transferred ownership to GenOn Florida, LP. In January 2012, GenOn Florida, LP sold those units to OUC. At the same time, OUC requested that all conditions in Permit Number 0090196-AV (under GenOn's name) be incorporated into the existing OUC Permit Number 0090008-AV to allow OUC to operate the facility under a single Title V permit.

This current report presents a revised BART exemption modeling analysis, which includes nitrogen oxides  $(NO_x)$  and sulfur dioxide  $(SO_2)$  emissions from the BART-eligible emissions units at the Plant. In April 2012, OUC committed to eliminate the use of liquid fuels in Unit No. 2 and Unit No. 3. As a result, BART modeling results presented in this report reflect PM,  $NO_x$ , and  $SO_2$  emissions for firing natural gas at these units. (Since propane has the same low sulfur content fuel characteristics as natural gas, modeling was performed for natural gas only.)

### 1.1 REGULATORY OVERVIEW

Pursuant to Section 403.061(35), Florida Statutes, the federal Clean Air Act (CAA), and the regional haze regulations contained in Title 40, Part 51 of the Code of Federal Regulations (40 CFR 51), Subpart P – Protection of Visibility, FDEP is required to ensure that certain sources of visibility-impairing pollutants in Florida use BART to reduce the impact of their emissions on regional haze in federal Prevention of Significant Deterioration (PSD) Class I areas. Requirements for individual source BART control technology determinations and for BART exemptions are contained in Rule 62-296.340 of the Florida Administrative Code (F.A.C.), which states that a BART-eligible source may demonstrate that it is exempt from the requirement for BART determination for all pollutants by performing an individual source attribution analysis in accordance with the procedures contained in 40 CFR 51, Appendix Y. A BART-eligible source is exempt from BART determination requirements if its contribution to visibility impairment,







as determined below, does not exceed 0.5 deciview (dv) above natural conditions in any Class I area [Rule 62-296.340(5)(c), F.A.C.].

The previous BART analysis which included only PM emissions was based on Rule 62-296.340(5)(c), F.A.C., which states that, for electric generating units (EGUs) subject to the Clean Air Interstate Rule (CAIR) Program, the source attribution analysis need only consider PM emissions (including primary sulfate) for comparison with the contribution threshold.

On July 6, 2011, EPA finalized the Cross-State Air Pollution Rule (CSAPR), which was to replace CAIR starting in 2012. CSAPR has different emission requirements for NO<sub>x</sub> and SO<sub>2</sub>. The understanding under CAIR that compliance with CAIR requirements satisfied BART requirements for EGUs is no longer valid under CSAPR. EPA is developing a rule that would determine whether CSAPR is better than BART using a two-prong test and appropriate air quality modeling. The Federal Register notice for the final rule of CSAPR said that "EPA has not conducted any technical analysis to determine whether compliance with the Transport Rule would satisfy Reasonably Available Control Technology (RACT) requirements for EGUs in any nonattainment areas or Regional Haze BART-related requirements. For that reason, EPA is neither making determinations nor establishing any presumptions that compliance with the Transport Rule satisfies any RACT- or BART-related requirements for EGUs."

However, on December 30, 2011, the United States Court of Appeals for the D.C. Circuit issued its ruling to stay CSAPR pending judicial review. As a result, CAIR has been put back into effect. The court set a speedy path to hear the legal arguments in the case, which were presented to the U.S. Court of Appeals in Washington, D.C. on April 13, 2012. However, a final ruling on CSAPR may not come until later this year or possibly in 2013.

It is expected that CSAPR is most likely to be reinstated in principle with the similar provisions as currently promulgated. If CSAPR is determined to be an alternative program that may substitute for source-specific BART, then the same BART exemption modeling analyses for the Plant performed in 2007 should still be valid. However, the current version of CSAPR has different requirements for different states. For example, in Florida, it does not regulate SO<sub>2</sub> emissions and only has ozone-season NO<sub>x</sub> emissions requirements. As a result, the BART exemption analyses for the Plant, which was previously based on visibility impacts due to PM emissions only, need to be re-evaluated, including PM, NO<sub>x</sub>, SO<sub>2</sub> and sulfate emissions.

### 1.2 REPORT INFORMATION

The source information and methodologies used for the revised BART exemption modeling are the same as those presented in the document entitled "Best Available Retrofit Technology (BART) Exemption Modeling Analysis Results" and were included the BART Protocol that was previously submitted to FDEP in 2006.





A description of the BART-eligible emissions units is presented in Section 2.0. A general description of the modeling methodology is presented in Section 3.0. The results of the BART exemption analysis are presented in Section 4.0.





### 2.0 DESCRIPTION OF BART-ELIGIBLE EMISSIONS UNITS

### 2.1 GENERAL DESCRIPTION AND LOCATION

The BART-eligible emissions units at the Plant are the two oil- and natural gas-fired conventional steam electric generating units, designated as Unit No. 2 and Unit No. 3. Unit No. 2 is a nominal 188-megawatt (MW) class (electric) steam generator while Unit No. 3 is a nominal 328-MW class (electric) steam generator. As previously discussed, liquid fuels will be eliminated from use in these units in the future.

The Plant is located at Universal Transverse Mercator (UTM) (East, North) coordinates: (521.5, 3151.7) kilometers (km) in UTM Zone 17. The only PSD Class I areas located within 300 km of the plant are:

- Chassahowitzka National Wilderness Area (NWA)- 180 km
- Everglades National Park (NP)- 297 km
- Okefenokee NWA- 267 km

### 2.2 STACK, OPERATING, AND EMISSION RATES

The stack and operating data for the BART-eligible emissions units were presented in detail in the BART Protocol previously submitted to FDEP. The emissions units are regulated under Acid Rain-Phase II, Fossil Fuel Steam Generators with more than 250 million Btu per Hour (MMBtu/hr) Heat Input (Rule 62-296.405, F.A.C.).

Table 1 presents the stack data, operating parameters, and emissions of PM, SO<sub>2</sub>, and NO<sub>x</sub> for natural gas-firing.

The EPA BART guidelines indicate that the emission rate to be used for BART modeling is the highest 24-hour actual emission rate representative of normal operations for the modeling period. Depending on the availability of the source data, the source emissions information should be based on the following, in order of priority based on the BART common protocol:

- 24-hour maximum emissions based on continuous emission monitoring (CEM) data for the period 2001 to 2003
- Facility stack test emissions
- Potential to emit
- Allowable permit limits
- AP-42 emission factors

For this analysis, the PM, SO<sub>2</sub>, and NO<sub>x</sub> emission rates were based on the potential to emit by assuming that each unit will fire natural gas at maximum load for 8,760 hours in a year. Emission factors were obtained from AP-42 for natural gas-firing for these size boilers (Chapter 1.4, Natural Gas Combustion).





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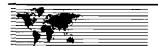
 $SO_2$  emission rates were based on firing natural gas with a sulfur content of 2 grains per 100 standard cubic foot (2 gr S/100 scf).  $NO_x$  emissions were based on the emission factor for tangentially fired boilers. PM emissions included both filterable and condensable emissions.

Sulfuric acid mist (SAM) emissions are also included in the visibility assessment. For this analysis, because AP-42 does not provide emission factors for SAM emissions for natural gas-fired boilers, these emissions were assumed to be approximately 33 percent of the SO<sub>2</sub> emissions based on the National Park Service (NPS) BART worksheet for developing emissions for natural gas-fired units (in this case, based on combustion turbines, since that is the only natural gas-fired source for which SAM emissions are presented). This provides a conservative estimate of these emissions since they are expected to be much lower. In addition, SAM emissions were not subtracted from SO<sub>2</sub> emissions, providing another conservative assumption in the modeling.

Particle size distribution is also included in the modeling. Based on information from AP-42 for natural gas-firing, PM has been estimated to be less than 1 micrometer (µm) in size. As a result, PM was split equally between PM sizes of 0 to 0.63 µm and 0.63 to 1.0 µm.

Based on discussions with FDEP, building downwash effects will generally not be considered in the modeling analysis because these effects are considered to be minimal in assessing impacts if the distance of the nearest PSD Class I area to a plant is greater than 50 km. Because the Plant is located more than 50 km from any PSD Class I area, building downwash effects are expected to be minimal and, therefore, not included in the analysis.





### 3.0 MODELING METHODOLOGY

The BART modeling that originally was performed for the Plant was based on the CALPUFF model, Version 5.756, also known as the "BART Version CALPUFF." Based on discussions with FDEP, BART modeling performed now to include SO<sub>2</sub> and NO<sub>x</sub> emissions can be performed with that version of CALPUFF or, at the recommendation by the Federal Land Manager (FLM), the current regulatory version of CALPUFF, Version 5.8, Level 070623. For this analysis, the current regulatory version of CALPUFF was used. In addition, the post-processing programs associated with the current regulatory version of CALPUFF were also used (i.e., POSTUTIL, CALPOST), also recommended by the FLM.

The methods and assumptions used in the CALPUFF model were previously presented in the BART Protocol and Exemption Report. From those reports, the 4-km spacing Florida domain for the meteorological data developed for 2001 to 2003 using CALMET was used for the BART exemption. From discussions with FDEP, the meteorological data can be based on data that were processed for 2001 to 2003 through EPA. As a result, the current modeling was performed using the "EPA meteorological data." The major features used in preparing these CALMET data have also been described in Section 4.0 of the BART Protocol.

Based on FDEP guidelines, the 98<sup>th</sup> percentile, i.e., the 8<sup>th</sup> highest 24-hour average visibility impairment value in any year, or the 22<sup>nd</sup> highest 24-hour average visibility impairment value over 3 years combined, whichever is higher, is compared to 0.5 dv in the source attribution analysis.

Based on the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) recommendation, Visibility Method 6 was used in the BART-related modeling, which will compute extinction coefficients for hygroscopic species (modeled and background) using a monthly function of relative humidity [f(RH)] in lieu of calculating hourly RH factors. Monthly RH values from Table A-3 of EPA's *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule* (Haze Guideline) was used. Monthly f(RH) factors for the Class I areas within 300 km of the Indian River Plant are as follows:

| Month    | Chassahowitzka<br>NWA | Everglades<br>NP | Okefenokee<br>NWA |
|----------|-----------------------|------------------|-------------------|
| January  | 3.8                   | 2.7              | 3.5               |
| February | 3.5                   | 2.6              | 3.2               |
| March    | 3.4                   | 2.6              | 3.1               |
| April    | 3.2                   | 2.4              | 3.0               |
| May      | 3.3                   | 2.4              | 3.6               |





| Month     | Chassahowitzka<br>NWA | Everglades<br>NP | Okefenokee<br>NWA |
|-----------|-----------------------|------------------|-------------------|
| June      | 3.9                   | 2.7              | 3.7               |
| July 3.9  |                       | 2.6              | 3.7               |
| August    | 4.2                   | 2.9              | 4.1               |
| September | 4.1                   | 3.0              | 4.0               |
| October   | 3.9                   | 2.8              | 3.8               |
| November  | 3.7                   | 2.6              | 3.5               |
| December  | December 3.9          |                  | 3.6               |

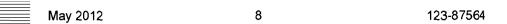
Method 6 requires input of natural background (BK) concentrations of ammonium sulfate (BKSO<sub>4</sub>), ammonium nitrate (BKNO<sub>3</sub>), coarse particulates (BKPMC), organic carbon (BKOC), soil (BKSOIL), and elemental carbon (BKEC) in micrograms per cubic meter (µg/m³). The model then calculates the natural background light extinction and haze index based on these values.

According to FDEP recommendations, the natural background light extinctions may be based on haze index (HI) values (in dv) for either the annual average or the 20-percent best visibility days provided by EPA in Appendix B of the Haze Guideline document (using the 10<sup>th</sup> percentile HI value). For this BART analysis, the annual average HI values were used to determine natural background light extinctions of the Class I areas. The light extinction coefficient in inverse megameters (Mm-1) is based on the concentration of the visibility impairing components and the extinction efficiency, in square meters per gram (m²/g), for each component.

Per VISTAS and FDEP recommendations, the natural background light extinctions that are equivalent to EPA-provided background HI values for each Class I area, based on the annual average, were estimated using the following background values:

- Rayleigh scattering = 10 Mm-1
- Concentrations of BKSO<sub>4</sub>, BKNO<sub>3</sub>, BKPMC, BKEC, and BKEC = 0.0
- BKSOIL concentration, which is estimated from the extinction coefficient that corresponds to EPA's HI value (corresponding to the annual average) and then subtracting the Rayleigh scattering of 10 Mm-1 (assumes that the extinction efficiency of soil is 1 m²/g). The BKSOIL concentration is estimated by subtracting the Rayleigh scattering of 10 Mm-1 from the extinction coefficient that corresponds to EPA's haze index value for the annual average light extinction coefficient, then dividing the remainder by the BKSOIL extinction efficiency of 1 m²/g.





According to Appendix B of the Haze Guidance document, the annual average light extinction coefficients for each Class I area and corresponding calculated BKSOIL concentrations are as follows:

- Chassahowitzka NWA 21.45 Mm-1 (equivalent to 7.63 dv); 11.45 µg/m³
- Everglades NP 20.77 Mm-1 (equivalent to 7.31 dv);  $10.77 \mu g/m^3$
- Okefenokee NWA 21.40 Mm-1 (equivalent to 7.61 dv); 11.40 µg/m³

The atmospheric light extinction estimation technique using an algorithm developed by the Interagency Monitoring of Protected Visual Environments (IMPROVE) committee, which was adopted by the EPA under the 1999 Regional Haze Rule (RHR) and referred to as the "1999 IMPROVE" algorithm, was used in this revised analysis. This algorithm for estimating light extinction from particle speciation data tends to underestimate light extinction for the highest haze conditions and overestimate it for the lowest haze conditions, and does not include light extinction due to sea salt, which is important at sites near seacoasts. As a result of these limitations, the IMPROVE Steering Committee developed the "new IMPROVE algorithm" for estimating light extinction from particulate matter component concentrations, which provides a better correspondence between measured visibility and that calculated from particulate matter component concentrations. A detailed description of the new IMPROVE algorithm and its implementation was presented in Section 3.4 of the BART Protocol.

As part of the processing, POSTUTIL is used to speciate PM emissions into various categories to account for their effect on potentially reducing regional visibility. Filterable PM consists of 3 subcategories: PM coarse, elemental carbon, and soil. Condensable PM consists of 2 subcategories: secondary aerosol organics (SOA) and inorganics (generally considered SAM). For this analysis, all PM emissions were assumed to be condensable organic aerosols (SOA). This provides a conservative assumption since SOA has a higher light extinction efficiency than all filterable particles except elementary carbon. SAM emissions were modeled directly.

Because Method 6 was used to predict regional haze impacts with CALPOST, these impacts are produced using the 1999 IMPROVE algorithm. As a result, the FLM developed a spreadsheet to adjust those impacts to ones based on the new IMPROVE algorithm. The FLM spreadsheet was used to adjust the CALPOST output for the Plant to those for the new IMPROVE algorithm

Visibility impacts were predicted at the PSD Class I area using receptors provided by the NPS.





### 4.0 BART EXEMPTION MODELING RESULTS

Summaries of the maximum visibility impairment values for the Plant BART-eligible emission units estimated using the new IMPROVE algorithm are presented in Tables 2 and 3. The 98<sup>th</sup> percentile (i.e., 8<sup>th</sup> highest) 24-hour average visibility impairment values for the years 2001, 2002, and 2003, and the 22<sup>nd</sup> highest 24-average visibility impairment value over the three years, are presented in Table 2. The 8<sup>th</sup> highest visibility impairment values predicted at the PSD Class I areas for each year are presented in Table 3.

As shown in Tables 2 and 3, the 8<sup>th</sup> highest visibility impairment values predicted for each year at the PSD Class I areas using the new 1999 IMPROVE algorithm are less than 0.5 dv. The 22<sup>nd</sup> highest visibility impairment value predicted over the 3-year period at these PSD Class I areas is also less than 0.5 dv. As a result, Unit No. 2 and Unit No. 3 are not subject to further BART requirements, such as a BART determination analysis, based on the exemption modeling results.



TABLE 1
BART MODELING DATA INPUT
OUC INDIAN RIVER PLANT- UNITS 2 AND 3
NATURAL GAS-FIRING

|  |                 |         | Valu    | 16        |         |
|--|-----------------|---------|---------|-----------|---------|
| Emission Unit                                      |                 | Unit    | 2       | Unit      | 3       |
| Location   |                 |         |         |           |         |
| UTM Coordinates                                    |                 |         |         |           |         |
| East   | km              | 521.    |         | 521.      |         |
| North  | km              | 3151.   | .7      | 3151.     | .7      |
| Zone   |                 | 17      |         | 17        |         |
| Lambert Conformal Coordinates                      |                 |         |         |           |         |
| X  | km              | 1593.7  | 34      | 1593.7    | 34      |
| у  | km              | -1136.1 | 128     | -1136.1   | 128     |
|  |                 |         |         |           |         |
| Stack Data   |                 |         |         |           |         |
| Height   | ft (m)          | 300     | (91.5)  | 300       | (91.5)  |
| Diameter   | ft (m)          | 14.00   | (4.27)  | 14.10     | (4.30)  |
| Base elevation                                     | ft (m)          | 20      | (6.10)  | 20        | (6.10)  |
| Operating Data                                     |                 |         |         |           |         |
| Heat input rate (maximum)                          | MMBtu/hr        | 2248.7  |         | 3208.5    |         |
| Exit gas temperature                               | ⁰F (K)          | 325     | (435.9) | 340       | (444.3) |
| Exit gas flow rate                                 | acfm            | 795,323 |         | 1,004,045 | ·       |
| Exit gas velocity                                  | ft/s (m/s)      | 86.1    | (26.3)  | 107.2     | (32.7)  |
| E a.b  |                 |         |         |           |         |
| Emission Data a, b PM emission factor - Filterable | lb/1000,000 scf | 1.9     |         | 1.9       |         |
| Condensable  | lb/1000,000 scf | 5.7     |         | 5.7       |         |
| Total  | lb/1000,000 scf | 7.6     |         | 7.6       |         |
| PM emission factor - Filterable                    | Ib/MMBtu        | 0.0019  |         | 0.0019    |         |
| Condensable  | lb/MMBtu        | 0.0019  |         | 0.0016    |         |
| Total  | lb/MMBtu        | 0.0035  |         | 0.0075    |         |
| PM emission rate - Filterable                      | lb/hr (g/s)     | 4.19    | (0.53)  | 5.98      | (0.75)  |
| Condensable  | lb/hr (g/s)     | 12.57   | (1.58)  | 17.93     | (2.26)  |
| Total <sup>e</sup>                                 | lb/hr (g/s)     | 16.76   | (2.11)  | 23.91     | (3.01)  |
| iotai  | ib/iii (g/3)    | 10.70   | (2.11)  | 20.01     | (3.01)  |
| SO <sub>2</sub> emission factor c, f               | lb/1000,000 scf | 6       |         | 6         |         |
|  | lb/MMBtu        | 0.00588 |         | 0.00588   |         |
| SO <sub>2</sub> emission rate                      | lb/hr (g/s)     | 13.2    | (1.67)  | 18.9      | (2.38)  |
|  |                 |         |         |           |         |
| NO <sub>x</sub> emission factor <sup>d</sup>       | lb/1000,000 scf | 170     |         | 170       |         |
|  | lb/MMBtu        | 0.167   |         | 0.167     |         |
| NO <sub>x</sub> emission rate                      | lb/hr (g/s)     | 374.8   | (47.2)  | 534.8     | (67.4)  |

<sup>&</sup>lt;sup>a</sup> Emission factors based on AP-42, Section 1.4, Emission Factors for Natural Gas Combustion (July 1998).

1,020 Btu/scf

2 grains Sulfur/100 scf

Sulfuric acid mist emissions were assumed to be 33 percent of SO<sub>2</sub> emissions, based on FLM BART worksheet (see text for description).



b Heat content for natural gas:

Sulfur content for natural gas:For tangentially fired boilers

Particle size for PM for natural gas-firing (AP-42, Section 1.4) assumes all PM is 1 micron or less in diameter. For modeling, PM was split evenly between ranges of 0 - 0.63 microns and 0.63 - 1.0 microns.

May 2012

TABLE 2
SUMMARY OF BART EXEMPTION MODELING RESULTS WITH NEW IMPROVE ALGORITHM
OUC INDIAN RIVER PLANT- UNITS 2 AND 3- NATURALGAS-FIRING

|                    | Distance (km)                    |    |                     |  |                | -                   | s with Impact >0.                      |                     |      |       | 22 <sup>nd</sup> Highes |
|--------------------|----------------------------------|----|---------------------|--|----------------|---------------------|--|---------------------|------|-------|-------------------------|
|                    | of Source to                     |    | 2001                |  |                | 2002                |  |                     | 2003 |       | Impact (dv)             |
| Class I Area       | Nearest Class I<br>Area Boundary | •  | No. of<br>Receptors | 8 <sup>th</sup> Highest<br>Impact (dv) | No. of<br>Days | No. of<br>Receptors | 8 <sup>th</sup> Highest<br>Impact (dv) | Over<br>3-Yr Period |      |       |                         |
| Chassahowitzka NWA | 180                              | NA | NA                  | 0.160                                  | NA             | NA                  | 0.119                                  | NA                  | NA   | 0.167 | 0.161                   |
| Everglades NP      | 297                              | NA | NA                  | 0.045                                  | NA             | NA                  | 0.045                                  | NA                  | NA   | 0.058 | 0.058                   |
| Okefenokee NWA     | 267                              | NA | NA                  | 0.100                                  | NA             | NA                  | 0.081                                  | NA                  | NA   | 0.084 | 0.087                   |

NA= not available



<sup>\*</sup> No. of days and receptors are not readily available from the spreadsheet developed by VISTAS to estimate visbility impairment with the new IMPROVE algorithm.

TABLE 3
VISIBILITY IMPACT RANKINGS AT PSD CLASS I AREAS
WITH NEW IMPROVE ALGORITHM
OUC INDIAN RIVER PLANT- UNITS 2 AND 3
NATURAL GAS-FIRING

|                    | _                | Pr      | edicted Impact (d | (vt   |
|--------------------|------------------|---------|-------------------|-------|
| Class I Area       | Rank             | 2001    | 2002              | 2003  |
| Chassahowitzka NWA | 1                | 0.368   | <br>0.669         | 0.306 |
| •                  | 2                | 0.259   | 0.315             | 0.208 |
|                    | 2<br>3           | 0.251   | 0.243             | 0.194 |
|                    | 4                | 0.234   | 0.220             | 0.193 |
|                    | 5                | 0.223   | 0.208             | 0.178 |
|                    | 6<br>7           | 0.206   | 0.172             | 0.177 |
|                    |                  | 0.199 ~ | 0.127             | 0.168 |
|                    | 8                | 0.160   | 0.119             | 0.167 |
| verglades NP       | 1                | 0.142   | 0.101             | 0.130 |
|                    | 2<br>3           | 0.113   | 0.083             | 0.101 |
|                    | 3                | 0.092   | 0.079             | 0.074 |
|                    | 4                | 0.076   | 0.070             | 0.072 |
|                    | 5                | 0.067   | 0.064             | 0.061 |
|                    | 6                | 0.063   | 0.063             | 0.067 |
|                    | 7                | 0.049   | 0.062             | 0.067 |
|                    | 8                | 0.045   | 0.045             | 0.058 |
| kefenokee NWA      | 1                | 0.184   | 0.194             | 0.266 |
|                    | 2<br>3           | 0.163   | 0.136             | 0.239 |
|                    | 3                | 0.162   | 0.126             | 0.197 |
|                    | 4                | 0.154   | 0.125             | 0.151 |
|                    | 5                | 0.137   | 0.108             | 0.129 |
|                    | 5<br>6<br>7<br>8 | 0.131   | 0.104             | 0.102 |
|                    | .7               | 0.126   | 0.083             | 0.086 |
|                    | 8                | 0.100   | 0.081             | 0.084 |



**ATTACHMENT 3** 



January 16, 2012

Project No. 11389555

Mr. Jonathon Holtom, P.E. DEP/DARM Division of Air Resource Management 2600 Blair Stone Road MS 5500 Tallahassee, Florida 32399-2400

RE:

**INDIAN RIVER PLANT ID NO. 0090008** 

AIR APPLICATION FOR REVISION TO TITLE V PERMIT NO. 0090008-005-AV

Dear Mr. Holtom.

This application is to revise the Indian River Plant (IRP) Title V air permit (Permit No. 0090008-005-AV). The current Title V permit contains language with respect to the combustion turbines and associated COMS requirements. OUC believes that the COMS periodic monitoring condition is troublesome as worded. Pursuant to 40 CFR 75.14, gas-fired turbines units are NOT required to install COMS. Condition C.7 was originally meant to apply to the electric utility steam generating units onsite, which were once owned and operated by OUC and included in the Title V permit with the combustion turbines. The permit language is a legacy issue, as this language was inadvertently retained in OUC's permit even though the steam units were removed from the permit. Based on previous discussions, the Department is agreeable to deleting the condition entirely. Therefore, OUC is requesting deletion of Condition C.7 with this application for a Title V permit revision.

Enclosed are an original and three copies of the application package. OUC appreciates your timely processing of the application. Please don't hesitate to contact me at (813) 287-1717 if you have any questions.

Sincerely.

**GOLDER ASSOCIATES INC.** 

Scott Osbourn, P.E.

Associate and Tampa Operations Manager

cc: Caroline Shine, DEP Central District David Baez, OUC Garfield Blair, OUC

Enclosure: Air Application Package

h:\projects\2011proj\11389555 ouc air permitting support\irp permit revision\draft\irp revision cover letter.docx

Golder Associates Inc.
5100 W. Lemon Street, Suite 208
Tampa, FL 33609 USA
Tel: (813) 287-1717 Fax: (813) 287-1716 www.golder.com





# 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 any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

• An initial federally enforceable state air operation permit (FESOP); or

Facility Owner/Company Name: Orlando Utilities Commission

• An initial, revised, or renewal Title V air operation permit.

### To ensure accuracy, please see form instructions.

### **Identification of Facility**

2. Site Name: Indian River Plant

3. Facility Identification Number: 0090008

| 4.        | Facility Location                |             |                   |                         |
|-----------|----------------------------------|-------------|-------------------|-------------------------|
|           | Street Address or Other Locator: | US 1 & King | s Hwy             |                         |
|           | City: Titusville                 | County: Br  | evard             | Zip Code: <b>32780</b>  |
| 5.        | Relocatable Facility?            | (           | 6. Existing Title | e V Permitted Facility? |
|           | Yes X No                         |             | X Yes             | □ No                    |
| <u>Ap</u> | plication Contact                |             |                   |                         |
| 1.        | Application Contact Name: Davi   | d R. Baez   |                   |                         |
| 2.        | Application Contact Mailing Add  | dress       | ,                 |                         |
|           | Organization/Firm: Orlando Utili | ties Commis | sion              |                         |
|           | Street Address: 5100 Alafaya     | Trail       |                   |                         |
|           | City: Orlando                    | State       | : FL              | Zip Code: <b>32831</b>  |
| 3.        | Application Contact Telephone N  | lumbers     |                   | ·                       |
|           | Telephone: (407) 434 - 3072      | ext.        | Fax: (407) 244    | 1 - 8794                |
| 4.        | Application Contact E-mail Addr  | ess: dbaez@ | ouc.com           |                         |
| <u>Ap</u> | plication Processing Informatio  | n (DEP Use  | )                 |                         |
| 1.        | Date of Receipt of Application:  |             | 3. PSD Numb       | er (if applicable):     |

DEP Form No. 62-210.900(1) – Form

2. Project Number(s):

Effective: 03/11/2010

4. Siting Number (if applicable):

1

### Purpose of Application

| This application for air permit is being submitted to obtain: (Check one)   |
|---|
| Air Construction Permit   |
| ☐ Air construction permit.  |
| Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).   |
| Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL. |
| Air Operation Permit  |
| ☐ Initial Title V air operation permit.   |
| X 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 is to revise the Indian River Plant (IRP) Title V air permit (Permit No. 0090008-005-AV). The current Title V permit contains language with respect to the combustion turbines and associated COMS requirements. OUC believes that the COMS periodic monitoring condition is troublesome as worded. Pursuant to 40 CFR 75.14, gas-fired turbines units are NOT required to install COMS. Condition C.7 was originally meant to apply to the electric utility steam generating units onsite, which were once owned and operated by OUC and included in the Title V permit with the combustion turbines. The permit language is a legacy issue, as this language was inadvertently retained in OUC's permit even though the steam units were removed from the permit. Based on previous discussions, the Department is agreeable to deleting the condition entirely. Therefore, OUC is requesting deletion of Condition C.7 with this application for a Title V permit revision (public notice required).

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# **Scope of Application**

| Emissions<br>Unit ID<br>Number | Description of Emissions Unit            | Air<br>Permit<br>Type | Air Permit<br>Processing<br>Fee |
|--------------------------------|--|-----------------------|---------------------------------|
| 004                            | 35 MW Simple Cycle Combustion Turbine A  |                       |                                 |
| 005                            | 129 MW Simple Cycle Combustion Turbine C |                       |                                 |
| 006                            | 129 MW Simple Cycle Combustion Turbine D |                       |                                 |
| 007                            | 35 MW Simple Cycle Combustion Turbine B  |                       |                                 |
|                                |  |                       |                                 |
|                                |  |                       |                                 |
|                                |  |                       |                                 |
|                                |  |                       |                                 |
| -                              |  |                       |                                 |
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| -                              |  |                       |                                 |
|                                |  |                       |                                 |
| -                              |  |                       |                                 |

|               |                       | 7 |      |               |  |
|---------------|-----------------------|---|------|---------------|--|
| Application I | Processing Fee        |   |      |               |  |
| Check one:    | Attached - Amount: \$ |   | X No | ot Applicable |  |

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DEP Form No. 62-210.900(1) – Form

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# Owner/Authorized Representative Statement - NA Complete if applying for an air construction permit or an initial FESOP.

| 1. | Owner/Authorized Representative Name:   |                    |           |  |  |  |  |
|----|---|--------------------|-----------|--|--|--|--|
| 2. | Owner/Authorized Representative Organization/Firm:  | e Mailing Address  |           |  |  |  |  |
|    | Street Address:   |                    |           |  |  |  |  |
|    | City:   | State:             | Zip Code: |  |  |  |  |
| 3. | Owner/Authorized Representative   | e Telephone Number | s         |  |  |  |  |
|    | Telephone: ( ) - ext.   | Fax: ( ) -         |           |  |  |  |  |
| 4. | . Owner/Authorized Representative E-mail Address:   |                    |           |  |  |  |  |
| 5. | . Owner/Authorized Representative Statement:  |                    |           |  |  |  |  |
|    | I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department. |                    |           |  |  |  |  |
|    | · .   |                    |           |  |  |  |  |
|    | Signature   |                    | Date      |  |  |  |  |

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fective: 03/11/2010

# Application Responsible Official Certification

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

|              | F, F   |  |  |  |
|--------------|--|--|--|--|
| 1.           | Application Responsible Official Name: Jan C. Aspuru, Vice President of Power Resources  |  |  |  |
| 2.           | . Application Responsible Official Qualification (Check one or more of the following options, as applicable):  |  |  |  |
|              | 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.  |  |  |  |
|              | For a partnership or sole proprietorship, a general partner or the proprietor, respectively.   |  |  |  |
|              | For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.  |  |  |  |
|              | The designated representative at an Acid Rain source or CAIR source.   |  |  |  |
| 3.           | Application Responsible Official Mailing Address Organization/Firm: Orlando Utilities Commission   |  |  |  |
|              | Street Address: Reliable Plaza, 100 West Anderson Street   |  |  |  |
|              | City: Orlando State: FL Zip Code: 32801  |  |  |  |
| 4.           | Application Responsible Official Telephone Numbers  Telephone: (407) 434 - 3135 ext. Fax: (407) 275 - 4120   |  |  |  |
| 5.           | Application Responsible Official E-mail Address: jaspuru@ouc.com   |  |  |  |
| 6.           | Application Responsible Official Certification:  |  |  |  |
| I, t         | 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. |  |  |  |
|              | Signature Date   |  |  |  |
| <del>/</del> | Ditto  |  |  |  |

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# **Professional Engineer Certification**

| 1    | Professional Engineer Name: Scott H. Osbourn, Senior Consultant   |
|------|---|
|      | Registration Number: 57557  |
| 2    | Professional Engineer Mailing Address   |
| ٠. ا | Organization/Firm: Golder Associates, Inc.  |
|      | Street Address: 5100 West Lemon Street, Suite 114   |
|      | City: Tampa State: FL Zip Code: 33609   |
| 3.   | Professional Engineer Telephone Numbers   |
|      | Telephone: (813) 287-1717 ext. Fax: (813) 287-1716  |
| 4.   | Professional Engineer E-mail 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 X, 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  Date   |
|      | (seal)  |
| * A1 | tach any exception to certification statement.  |

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# II. FACILITY INFORMATION A. GENERAL FACILITY INFORMATION

# **Facility Location and Type**

| Zone 17 East   | Facility UTM Coordinates Zone 17 East (km) 521.3 North (km) 3151.7 |    | 2. Facility Latitude/Longitude Latitude (DD/MM/SS) 28°29'36"N Longitude (DD/MM/SS) 80°46'57"W |                                 |  |  |
|--|--|----|---|---------------------------------|--|--|
| 3. Governmental Facility Code:  4. Facility Status  Code:  A |  | 5. | Facility Major Group SIC Code: 49   | 6. Facility SIC(s): <b>4911</b> |  |  |
| ·7. Facility Comment:  | Electric Power Plant   | •  |   |                                 |  |  |

# **Facility Contact**

| 1. | Facility Contact Name:  David R. Baez, Project Engineer, | Environmental Affai | irs                    |
|----|--|---------------------|------------------------|
| 2. | Facility Contact Mailing Address                         | 5                   |                        |
|    | Organization/Firm: Orlando Utili                         | ties Commission     |                        |
|    | Street Address: 5100 Alafaya                             | Trail               |                        |
|    | City: Orlando  | State: FL           | Zip Code: <b>32831</b> |
| 3. | Facility Contact Telephone Numb                          | bers:               |                        |
|    | Telephone: (407) 434 - 3072                              | ext.                | Fax: (407) 244 - 8794  |
| 4. | Facility Contact E-mail Address:                         | dbaez@ouc.com       |                        |

### Facility Primary Responsible Official - NA

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

|    | V I V I                    | _           |                  |        |           |  |
|----|----------------------------|-------------|------------------|--------|-----------|--|
| 1. | Facility Primary Responsib | ole Officia | al Name:         |        |           |  |
| 2  | Facility Primary Responsib | le Offici   | al Mailing Addre | ess    |           |  |
|    |                            |             |                  |        |           |  |
|    | Organization/Firm:         |             |                  |        |           |  |
|    | Street Address:            |             | •                |        |           |  |
|    | City:                      |             | State:           |        | Zip Code: |  |
| 3. | Facility Primary Responsib | ole Officia | al Telephone Nu  | ımbers |           |  |
|    | Telephone: ( ) -           | ext.        | Fax: ( ) -       |        |           |  |
| 4. | Facility Primary Responsib | ole Officia | al E-mail Addres | ss:    |           |  |

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### Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

| 1. Small Business Stationary Source Unknown                                     |
|---|
| 2. Synthetic Non-Title V Source   |
| 3. X Title V Source   |
| 4. X Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs) |
| 5. Synthetic Minor Source of Air Pollutants, Other than HAPs                    |
| 6. Major Source of Hazardous Air Pollutants (HAPs)                              |
| 7. Synthetic Minor Source of HAPs   |
| 8. X One or More Emissions Units Subject to NSPS (40 CFR Part 60)               |
| 9.  One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60) |
| 10. One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)   |
| 11. Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))                |
| 12. Facility Regulatory Classifications Comment:                                |
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# **List of Pollutants Emitted by Facility**

| 1. Pollutant Emitted | 2. Pollutant Classification | 3. Emissions Cap [Y or N]? |
|----------------------|-----------------------------|----------------------------|
| NO <sub>x</sub>      |                             |                            |
| СО                   |                             |                            |
| SO <sub>2</sub>      |                             |                            |
| PM.                  |                             |                            |
| PM <sub>10</sub>     |                             |                            |
| voc                  |                             |                            |
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|                      |                             |                            |

### **B. EMISSIONS CAPS**

# Facility-Wide or Multi-Unit Emissions Caps

| 1. Pollutant Subject to Emissions | 2. Facility-<br>Wide Cap<br>[Y or N]? | 3. Emissions Unit ID's Under Cap | 4. Hourly<br>Cap<br>(lb/hr) | 5. Annual<br>Cap<br>(ton/yr) | 6. Basis for<br>Emissions<br>Cap |
|-----------------------------------|---------------------------------------|----------------------------------|-----------------------------|------------------------------|----------------------------------|
| Cap                               | (all units)                           | (if not all units)               |                             |                              |                                  |
|                                   |                                       | -                                |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              | "                                |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |
|                                   |                                       |                                  |                             |                              |                                  |

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7. Facility-Wide or Multi-Unit Emissions Cap Comment:

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# C. FACILITY ADDITIONAL INFORMATION

# Additional Requirements for All Applications, Except as Otherwise Stated

| 1.  | Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  X Previously Submitted, Date: May 20, 2009  |
|-----|---|
| 2.  | Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  X Previously Submitted, Date: May 20, 2009   |
| 3.  | Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)  Attached, Document ID:  X Previously Submitted, Date: May 20, 2009 |
| Ad  | Iditional Requirements for Air Construction Permit Applications - NA  |
| 1.  | Area Map Showing Facility Location:  Attached, Document ID: Not Applicable (existing permitted facility)  |
| 2.  | Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):  Attached, Document ID:   |
| 3.  | Rule Applicability Analysis:  Attached, Document ID:  |
| 4.  | List of Exempt Emissions Units:  Attached, Document ID: Not Applicable (no exempt units at facility)  |
| 5.  | Fugitive Emissions Identification:  Attached, Document ID: Not Applicable   |
| 6.  | Air Quality Analysis (Rule 62-212.400(7), F.A.C.):  Attached, Document ID: Not Applicable   |
| 7.  | Source Impact Analysis (Rule 62-212.400(5), F.A.C.):  Attached, Document ID: Not Applicable   |
| 8.  | Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):   Mot Applicable   |
| 9.  | Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):     Attached, Document ID:   Not Applicable  |
| 10. | Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):  Not Applicable   |

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# C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

# Additional Requirements for FESOP Applications - NA

| 1.         | List of Exempt Emissions Units:   |
|------------|---|
|            | Attached, Document ID: Not Applicable (no exempt units at facility)   |
| <u>A</u> ( | Iditional Requirements for Title V Air Operation Permit Applications  |
| 1.         | List of Insignificant Activities: (Required for initial/renewal applications only)  Attached, Document ID: X Not Applicable (revision application)  |
| 2.         | Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)  Attached, Document ID:  X Not Applicable (revision application with no change in applicable requirements)  |
| 3.         | Compliance Report and Plan: (Required for all initial/revision/renewal applications)  Attached, Document ID: NA  Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
| 4.         | List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)  Attached, Document ID:  Equipment/Activities Onsite but Not Required to be Individually Listed  Not Applicable  |
| 5.         | Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)  Attached, Document ID: X Not Applicable  |
| 6.         | Requested Changes to Current Title V Air Operation Permit:  Attached, Document ID: IRP-FI-C6 Not Applicable   |

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

# C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

| 1. Acid Rain Program Forms:  |   |
|--|---|
| Acid Rain Part Application (DEP Form No. 6  Attached, Document ID:  Not Applicable (not an Acid Rain source) | X Previously Submitted, Date: May 20, 2009          |
| Phase II NO <sub>X</sub> Averaging Plan (DEP Form No  Attached, Document ID:  X Not Applicable               | . 62-210.900(1)(a)1.):  Previously Submitted, Date: |
| New Unit Exemption (DEP Form No. 62-210  Attached, Document ID:  Not Applicable                              |   |
| 2. CAIR Part (DEP Form No. 62-210.900(1)(b)  Attached, Document ID:  Not Applicable (not a CAIR source)      | Previously Submitted, Date: May 20, 2009            |
| Additional Requirements Comment  | ·<br>   |
|  |   |
|  |   |
|  |   |
|  |   |

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ATTACHMENT IRP-FI-C6
Requested Changes to the TV Permit No. 0090008-005-AV

### SECTION III. EMISSIONS UNITS'AND SPECIFIC CONDITIONS.

### Subsection C. Common Conditions for Emissions Units 004, 005, 006 and 007

Subsection C. The specific conditions in this section apply to the following emissions units:

| EU No. | Brief Description                        |
|--------|--|
| 004    | 35 MW Simple Cycle Combustion Turbine A  |
| 005    | 129 MW Simple Cycle Combustion Turbine C |
| 006    | 129 MW Simple Cycle Combustion Turbine D |
| 007    | 35 MW Simple Cycle Combustion Turbine B  |

### **Federal Regulations**

C.1. NSPS Subpart GG. These emissions units are subject to all applicable requirements of NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. [PSD-FL-130 and PSD-FL-173]

### **Excess Emissions**

- C.2. Excess Emissions Permitted. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- C.3. Excess Emissions Permitted. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]
- C.4. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- C.5. Excess Emissions Defined. For the purpose of reports required under 40 CFR 60.7, periods of excess emissions that shall be reported are defined as follows:
  - a. Nitrogen oxides. Anyone-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
  - b. *Sulfur dioxide*. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.3 percent.

[40 CFR 60.334; PSD-FL-130 and PSD-FL-173]

### **Monitoring of Operations**

C.6. <u>CAM Plan.</u> These emissions units are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297 .310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-21 3.440(l)(b) 1.a., F.A.C.]

### **Continuous Monitoring Requirements**

C.7. COMS for Periodic Monitoring. OUC shall have installed continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. OUC shall maintain and operate the COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. [Rule 62 213.440, F.A.C., and applicant request]

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