FPL

February 12, 2009

Trina Vielhauer
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia St.
Tallahassee, FL 32399

Attention: Al Linero

Re: FPL Riviera Beach Energy Center Project
Air Construction Permit Application

Dear Ms. Vielhauer:

Please find enclosed the Air Construction Permit Application prepared by Golder Associates for Florida Power & Light Company's (FPL) Riviera Beach Energy Center Project (RBEC or Project) in Palm Beach County. The enclosed Application is being filed for the purpose of establishing federally enforceable emissions limitations that ensure the Project will not result in a significant net increase in emissions of any regulated air pollutant, in accordance with the Department's federally approved minor source air construction permit program under Florida's federally required State Implementation Plan. FPL is separately filing an application for site certification of the Project pursuant to the Florida Electrical Power Plant Siting Act.

If you have any comments or questions regarding the attached, please feel free to contact me at (561) 691-7518 or Jacquelyn Lorne at (561) 691-7063. You may also contact Mr. Scott Osbourn of Golder Associates at (813) 287-1717 for technical questions.

Sincerely,

Barbara P. Linkiewicz
Director of Environmental Licensing

cc: Al Linero, FDEP BAR
Timothy Gray, FDEP Southeast District
Scott Osbourn, Golder Associates
Peter Cunningham, Hopping Green & Sams
Michael Halpin, FDEP Siting Office

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FEB 13 2009

BUREAU OF AIR REGULATION

AIR CONSTRUCTION PERMIT APPLICATION FOR THE FPL RIVIERA BEACH ENERGY CENTER PALM BEACH COUNTY, FLORIDA

Prepared For:

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408

Prepared By:

Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

January 2009

0838-7633

APPLICATION FOR
AIR CONSTRUCTION PERMIT

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

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To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Florida Power & Light Company**	
2. Site Name: **Riviera Beach Energy Center (RBEC)**	
3. Facility Identification Number: **0990042**	
4. Facility Location... Street Address or Other Locator: **200-300 Broadway** City: **Riviera Beach** County: **Palm Beach** Zip Code: **33404**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Barbara Linkiewicz, Director of Environmental Licensing**
2. Application Contact Mailing Address... Organization/Firm: **Florida Power & Light Company** Street Address: **700 Universe Blvd.** City: **Juno Beach** State: **Florida** Zip Code: **33408**
3. Application Contact Telephone Numbers... Telephone: **(561) 691-7518** ext. Fax: **(561) 691-7070**
4. Application Contact E-mail Address: **Barbara.P.Linkiewicz@FPL.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 2/13/09	3. PSD Number (if applicable):
2. Project Number(s): 0990042-006-AC	4. Siting Number (if applicable):

APPLICATION INFORMATION

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)

☐ 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

Application for an air construction permit to convert the existing Riviera Beach Plant to a 3-on-1 combined-cycle facility. The attached Air Report provides detailed information regarding the proposed project. The combustion turbines (CTs) being considered for this application include the Mitsubishi Power Systems (MPS) "G" Class CTs and the Siemens Power Generation, Inc. "H" Class CTs. The MPS "G" Class CTs consist of the 501G1, 501G1PLUS, and 501G3.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
1A - 1C	Three MPS 501G Class CTs/HRSGs or equivalent	AC1A	
	- OR -		
1A - 1C	Three Siemens H CTs/HRSGs	AC1A	
	- AND -		
2	Auxiliary Boiler	AC1A	
3	Fuel Gas Heater	AC1A	
4	Emergency Diesel Generators	AC1A	
5	Compressor Station	AC1A	
6	Fire Pump Engine	AC1A	
7	Temporary Construction Boiler	AC1A	

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name :
   Randall R. LaBauve, Vice President
2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **Florida Power & Light Company**
   Street Address: **700 Universe Blvd.**
   City: **Juno Beach** State: **FL** Zip Code: **33408**
3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(561) 691-7001** ext. Fax: **(561) 691-7070**
4. Owner/Authorized Representative E-mail Address: **Randall.R.LaBauve@FPL.com**
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

   Feb. 12, 2009
   Date

APPLICATION INFORMATION

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:

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, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address...
Organization/Firm:
Street Address:
City: State: Zip Code:

4. Application Responsible Official Telephone Numbers...
Telephone: ( ) ext. Fax: ( )

5. Application Responsible Official E-mail Address:

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Signature Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Scott Osbourn**
   Registration Number: **57557**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **5100 West Lemon 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 ☐, 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 2/2/09

(seal)

SCOTT OSBOURN LICENSE NO. 57557 STATE OF FLORIDA PROFESSIONAL ENGINEER

* **Attach any exception to certification statement.**

****Board of Professional Engineers Certificate of Authorization #00001670.**

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **523.1** North (km) **3149**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **28/28/10** Longitude (DD/MM/SS) **80/45/51**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Jeff Smith, Plant General Manager**
2. Facility Contact Mailing Address... Organization/Firm: **Florida Power & Light Company** Street Address: **200-300 Broadway** City: **Riviera Beach** State: **FL** Zip Code: **33404**
3. Facility Contact Telephone Numbers: Telephone: **(561) 845-3103** ext. Fax: **(561) 845-3145**
4. Facility Contact E-mail Address:

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."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☐ 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. ☒ 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:	
The proposed project is not subject to PSD for any pollutant. CT and HRSG Duct Burners are subject to NSPS Subpart KKKK.	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	A	N
PM_{10}	A	N
VOC	A	Y
SO_2	A	N
NO_x	A	N
CO	A	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
VOCs	**Y**			**99.1**	**PSD Avoidance**

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

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: **See Air Report** ☐ Previously Submitted, Date:_____

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: **See Air Report** ☐ Previously Submitted, Date:_____

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: **See Air Report** ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable (existing permitted facility)

2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   ☒ Attached, Document ID: **See Air Report**

3. Rule Applicability Analysis:
   ☒ Attached, Document ID: **See Air Report**

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.):
    ☐ Attached, Document ID:_____ ☒ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☒ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☐ 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:_____
   ☐ 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:_____
   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:_____ ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:_____ ☐ Not Applicable

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)):
   ☒ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☒ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   ☒ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

Although this application is not for a PSD permit, it will require a PSD or Nonattainment Area (NAA) preconstruction review pursuant to Rule 62-212.400 or 62-212.500, F.A.C.

Although both the CAIR and Hg Budget Part boxes are checked above, these programs are currently under litigation and the ultimate applicability to this project remains uncertain.

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.

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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ 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. Description of Emissions Unit Addressed in this Section:
   Three CT/HRSGs; may be MPS 501G Class or equivalent or Siemens H Class CTs.

3. Emissions Unit Identification Number: **1A, 1B, and 1C**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**2011**	**2013**	**49**

8. Federal Program Applicability: (Check all that apply)

   ☒ Acid Rain Unit

   ☐ CAIR Unit

   ☐ Hg Budget Unit

9. Package Unit:
   Manufacturer: **Mitsubishi Power Systems (MPS) or Siemens** Model Number: **MPS Frame G or equivalent, Siemens H**

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Combined cycle unit will have a nominal capacity of 1,250 MW consisting of 3 CT/HRSG trains.

Emissions Unit Control Equipment/Method: Control **1** of **2**

1. Control Equipment/Method Description:
   Natural Gas: Combined Cycle - SCR

2. Control Device or Method Code: **139**

Emissions Unit Control Equipment/Method: Control **2** of **2**

1. Control Equipment/Method Description:
   Distillate Fuel Oil:
   Water Injection
   Combined Cycle - SCR

2. Control Device or Method Code: **25, 28**

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:

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:	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	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **See Tables A-1 501G Class and A-1 SH for maximum heat input when firing natural gas; and Tables A-5 501G Class and A-5 SH for maximum heat input when firing ultra low sulfur light oil.**		

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Exhausts through the HRSG stack.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **149** feet	7. Exit Diameter: **See Air Report** Feet
8. Exit Temperature: **See Air Report**°F	9. Actual Volumetric Flow Rate: **See Air Report** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Tables 2-1A, 2-2A, 2-1B, and 2-2B for the stack parameters associated with each CT when firing natural gas and ultra low sulfur light oil.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **2**

1. Segment Description (Process/Fuel Type): **Distillate (No. 2) Fuel Oil [Ultra Low Sulfur (0.0015%) Light Oil]**		
2. Source Classification Code (SCC): **20100101**	3. SCC Units: **1,000 Gallons Used**	
4. Maximum Hourly Rate: **17.8**	5. Maximum Annual Rate: **16,753**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.0015**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **131**
10. Segment Comment: **Million British Thermal Units (Btu) per SCC unit = 130.5 (rounded to 131). Based on 7.1 pounds per gallon (lb/gal); LHV = 18,387 Btu/lb ISO conditions. Max hourly rate based on 35°F, max annual rate based on 59°F and 1,000 hours per year (hr/yr) operation per CT. Based on MPS 501G Units. See Air Permit Application Report for further details on MPS G and Siemens H models.**		

Segment Description and Rate: Segment **2** of **2**

1. Segment Description (Process/Fuel Type): **Natural Gas**		
2. Source Classification Code (SCC): **20100201**	3. SCC Units: **Million cubic feet**	
4. Maximum Hourly Rate: **2.7**	5. Maximum Annual Rate: **22,965**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **918**
10. Segment Comment: **Based on 918 Btu/cf (LHV). Max hourly rate based on 35°F. Max annual rate based on 59°F and 8,760 hr/yr operation. Based on MPS 501G Units. See Air Permit Application Report.**		

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

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
PM_{10}			EL
SO_2			EL
NO_x	25, 28, 139		EL
CO			EL
VOC			EL

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: **Particulate Matter Total - PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **See Air Report** lb/hour **See Air Report** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Air Report** Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report, Appendix B for baseline emissions. Tables 2-1A, 2-2A, and 2-3A for MPS 501G Class and Tables 2-1B, 2-2B, and 2-3B for Siemens H; and Appendix A.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **See Air Report; Table 4-1**	4. Equivalent Allowable Emissions: **See Air Report** lb/hour **See Air Report** tons/year
5. Method of Compliance: **See Air Report, Table 4-1**	
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 (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 (Description of Operating Method):	

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: **Particulate Matter - PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **See Air Report** lb/hour **See Air Report** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Air Report** Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report, Appendix B for baseline emissions. Tables 2-1A, 2-2A, and 2-3A for MPS 501G Class and Tables 2-1B, 2-2B, and 2-3B for Siemens H; and Appendix A.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **See Air Report; Table 4-1**	4. Equivalent Allowable Emissions: **See Air Report** lb/hour **See Air Report** tons/year
5. Method of Compliance: **See Air Report, Table 4-1**	
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 (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 (Description of Operating Method):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **See Air Report** lb/hour **See Air Report** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Air Report** Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Air Report, Appendix B for baseline emissions. Tables 2-1A, 2-2A, and 2-3A for MPS 501G Class and Tables 2-1B, 2-2B, and 2-3B for Siemens H; and Appendix A.

11. Potential, Fugitive, and Actual Emissions Comment:

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 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **See Air Report; Table 4-1**	4. Equivalent Allowable Emissions: **See Air Report** lb/hour **See Air Report** tons/year
5. Method of Compliance: **See Air Report, Table 4-1**	
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 (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 (Description of Operating Method):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **See Air Report** lb/hour **See Air Report** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Air Report** Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report, Appendix B for baseline emissions. Tables 2-1A, 2-2A, and 2-3A for MPS 501G Class and Tables 2-1B, 2-2B, and 2-3B for Siemens H; and Appendix A.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **See Air Report; Table 4-1**	4. Equivalent Allowable Emissions: **See Air Report** lb/hour **See Air Report** tons/year
5. Method of Compliance: **See Air Report, Table 4-1**	
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 (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 (Description of Operating Method):	

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **See Air Report** lb/hour **See Air Report** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Air Report** Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Air Report, Appendix B for baseline emissions. Tables 2-1A, 2-2A, and 2-3A for MPS 501G Class and Tables 2-1B, 2-2B, and 2-3B for Siemens H; and Appendix A.

11. Potential, Fugitive, and Actual Emissions Comment:

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 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **See Air Report; Table 4-1**	4. Equivalent Allowable Emissions: **See Air Report** lb/hour **See Air Report** tons/year
5. Method of Compliance: **See Air Report, Table 4-1**	
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 (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 (Description of Operating Method):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **See Air Report** lb/hour **See Air Report** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **See Air Report** Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report, Appendix B for baseline emissions. Tables 2-1A, 2-2A, and 2-3A for MPS 501G Class and Tables 2-1B, 2-2B, and 2-3B for Siemens H; and Appendix A.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **See Air Report; Table 4-1**	4. Equivalent Allowable Emissions: **See Air Report** lb/hour **See Air Report** tons/year
5. Method of Compliance: **See Air Report, Table 4-1**	
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 (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 (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **FDEP Rule 62-296.320(4)(b)1, F.A.C. requires 20 percent opacity. Excess emissions provided by Rule 62-210.700(1).**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Proposed as emission limit for PM/PM_{10}.**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **2**

1. Parameter Code: **EM**	2. Pollutant(s): **NO_x**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **CEM required pursuant to 40 CFR, Part 75. NO_x monitoring includes diluent monitor (O_2 or CO_2).**	

Continuous Monitoring System: Continuous Monitor **2** of **2**

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See Air Report** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See Air Report** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See Air Report** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

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.

EMISSIONS UNIT INFORMATION
Section [2]
Auxiliary 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.)

☒ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ 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. Description of Emissions Unit Addressed in this Section:
Auxiliary Boiler

3. Emissions Unit Identification Number: **2**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**2011**	**2013**	**49**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: **Nebraska Boiler or equivalent** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [2]
Auxiliary Boiler

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Low NOx burners**
2. Control Device or Method Code: **205**

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:

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: **99.77** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **500** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

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 Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: **60** feet	7. Exit Diameter: **2.75** Feet
8. Exit Temperature: **296**°F	9. Actual Volumetric Flow Rate: **29,325** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Table 2-4 in Air Permit Application Report.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Natural gas**		
2. Source Classification Code (SCC):	3. SCC Units: **MMscf**	
4. Maximum Hourly Rate: **0.095**	5. Maximum Annual Rate: **47.5**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,055**
10. Segment Comment: **Maximum annual rate based on 500 hr/yr operation.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	Fuel Quality		EL
PM_{10}	Fuel Quality		EL
SO_2	Fuel Quality		EL
NO_x	205		EL
CO	Good Combustion		EL
VOC	Good Combustion		EL

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: **Particulate Matter Total - PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.70** lb/hour **0.17** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

0.007 lb/MMBtu x 99.77 MMBtu/hr = 0.698 lb/hr = 0.7 lb/hr
0.7 lb/hr x 500 hr / 2,000 lb = 0.17 TPY

11. Potential, Fugitive, and Actual Emissions Comment:

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **10% Opacity**	4. Equivalent Allowable Emissions: **0.70** lb/hour **0.17** tons/year
5. Method of Compliance: **EPA Method 9**	
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 (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 (Description of Operating Method):	

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: **Particulate Matter - PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.70** lb/hour **0.17** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.007 lb/MMBtu x 99.77 MMBtu/hr = 0.698 lb/hr = 0.7 lb/hr** **0.7 lb/hr x 500 hr / 2,000 lb = 0.17 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **10% Opacity**	4. Equivalent Allowable Emissions: **0.70** lb/hour **0.17** tons/year
5. Method of Compliance: **EPA Method 9**	
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 (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 (Description of Operating Method):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.54** lb/hour **0.14** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **2 grains S/100 scf gas** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: 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:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2 grains S/100 scf gas**	4. Equivalent Allowable Emissions: **0.54** lb/hour **0.14** tons/year
5. Method of Compliance: **Fuel Sampling and Analysis**	
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 (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 (Description of Operating Method):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **4.99** lb/hour **1.25** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.050 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.050 lb/MMBtu x 99.77 MMBtu/hr = 4.988 lb/hr = 4.99 lb/hr** **4.99 lb/hr x 500 hr / 2,000 lb = 1.25 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.050 lb/MMBtu**	4. Equivalent Allowable Emissions: **4.99** lb/hour **1.25** tons/year
5. Method of Compliance: **EPA Method 7e**	
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 (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 (Description of Operating Method):	

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **7.98** lb/hour **2.0** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.080 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.08 lb/MMBtu x 99.77 MMBtu/hr = 7.98 lb/hr** **7.98 lb/hr x 500 hr / 2,000 lb = 2.0 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.080 lb/MMBtu**	4. Equivalent Allowable Emissions: **7.98** lb/hour **2.0** tons/year
5. Method of Compliance: **EPA Method 10**	
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 (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 (Description of Operating Method):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.52** lb/hour **0.13** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.0052 lb/MMBtu x 99.77 MMBtu/hr = 0.52 lb/hr** **0.52 lb/hr x 500 hr / 2,000 lb = 0.13 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.005 lb/MMBtu**	4. Equivalent Allowable Emissions: **0.52** lb/hour **0.13** tons/year
5. Method of Compliance: **EPA Method 25A; Initial only**	
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 (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 (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **FDEP Rule 62-296.320(4)(b)1, F.A.C., requires 20% opacity. Excess emissions provided by Rule 62-210.700(1) F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Proposed as emission limit for PM/PM_{10}.**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See Air Report** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See Air Report** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See Air Report** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

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.

EMISSIONS UNIT INFORMATION
Section [3]
Fuel Gas Heater

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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ 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. Description of Emissions Unit Addressed in this Section:
   Natural Gas Fuel Heater(s)

3. Emissions Unit Identification Number: **3**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**2011**	**2013**	**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

   ☐ Hg Budget Unit

9. Package Unit:
   Manufacturer: **Hanover Compression Company or equivalent** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    See Air Permit application report.

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:

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: **10** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **30** feet	7. Exit Diameter: **1** Feet
8. Exit Temperature: **500**°F	9. Actual Volumetric Flow Rate: **4,950** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Table 2-6 in Air Permit Application Report.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Natural gas**		
2. Source Classification Code (SCC):	3. SCC Units: **1,000,000 SCF**	
4. Maximum Hourly Rate: **0.01**	5. Maximum Annual Rate: **83.03**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,055**
10. Segment Comment: **Maximum annual rate based on 8,760 hr/yr operation.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
PM/PM_{10}	Fuel Quality		EL
NO_x			EL
SO_2	Fuel Quality		EL
VOC			EL

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.8** lb/hour **3.49** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.08 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.08 lb/MMBtu x 10 MMBtu/hr = 0.8 lb/hr** **0.8 lb/hr x 8,760 hr/yr / (2,000 lb/ton) = 3.49 tons per year**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.08 lb/MMBtu**	4. Equivalent Allowable Emissions: **0.8** lb/hour **3.49** tons/year
5. Method of Compliance: **Manufacturer Certification**	
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 (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 (Description of Operating Method):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.95** lb/hour **4.2** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.095 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.095 lb/MMBtu x 10 MMBtu/hr = 0.95 lb/hr** **0.95 lb/hr x 8,760 hr/yr / (2,000 lb/ton) = 4.2 tons per year**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.095 lb/MMBtu**	4. Equivalent Allowable Emissions: **0.95** lb/hour **4.2** tons/year
5. Method of Compliance: **Manufacturer Certification**	
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 (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 (Description of Operating Method):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.054** lb/hour **0.237** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **2 gr / 100 SCF** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: 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:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2 gr / 100 SCF**	4. Equivalent Allowable Emissions: **0.054** lb/hour **0.237** tons/year
5. Method of Compliance: **Fuel vendor information**	
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 (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 (Description of Operating Method):	

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: **Particulate Matter - PM/PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.02** lb/hour **0.079** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.002 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
0.002 lb/MMBtu x 10 MMBtu/hr = 0.02 lb/hr
0.02 lb/hr x 8,760 hr/yr / (2,000 lb/ton) = 0.079 tons per year

11. Potential, Fugitive, and Actual Emissions Comment:

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 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **10% opacity**	4. Equivalent Allowable Emissions: **0.02** lb/hour **0.079** tons/year
5. Method of Compliance: **EPA Method 9**	
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 (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 (Description of Operating Method):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.05** lb/hour **0.228** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.005 lb/MMBtu x 10 MMBtu/hr = 0.05 lb/hr** **0.05 lb/hr x 8,760 hr/yr / (2,000 lb/ton) = 0.228 tons per year**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.005 lb/MMBtu**	4. Equivalent Allowable Emissions: **0.05** lb/hour **0.228** tons/year
5. Method of Compliance: **Natural gas**	
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 (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 (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Excess emissions provided by Rule 62-210.700.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See Air Report** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See Air Report** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See Air Report** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

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.

EMISSIONS UNIT INFORMATION
Section [4]
Emergency Diesel Generator

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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ 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. Description of Emissions Unit Addressed in this Section:

Emergency generators (2) to supply power in the event power is not available.

3. Emissions Unit Identification Number: **4**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**2011**	**2013**	**49**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: **Caterpillar** Model Number: **3516BTA**

10. Generator Nameplate Rating: **2.25** MW

11. Emissions Unit Comment:
Two 2,250-kW emergency generators (or equivalent). Information based on Caterpillar, 2,250 kW Diesel Generator Set.

EMISSIONS UNIT INFORMATION
Section [4]
Emergency Diesel Generator

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Good combustion practices - No. 2 fuel oil-fired.**
2. Control Device or Method Code: **N/A**

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:

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: **21.01** 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	**160** hours/year
6. Operating Capacity/Schedule Comment: **The emergency generators will normally be operated 1 to 2 hours per month for testing and maintenance. The emergency generators will meet the requirements of 40 CFR Part 60 Subpart IIII.**		

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **30** feet	7. Exit Diameter: **1.0** Feet
8. Exit Temperature: **916**°F	9. Actual Volumetric Flow Rate: **17,463** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Table 2-5 in Air Permit Application Report.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Diesel fuel combustion**		
2. Source Classification Code (SCC):	3. SCC Units: **1,000 gallons**	
4. Maximum Hourly Rate: **0.156**	5. Maximum Annual Rate: **24.9**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.0015**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **135.1**
10. Segment Comment: **Maximum annual rate based on 160 hr/yr operation.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
PM/PM_{10}			EL
NO_x			EL
SO_2	Fuel Quality		EL
VOC			EL

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **60.0** lb/hour **4.8** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **8.5 grams per horsepower-hour (g/hp-hr)** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions are for one generator.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **8.5 g/hp-hr**	4. Equivalent Allowable Emissions: **60.0** lb/hour **4.8** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII standards.**	
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 (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 (Description of Operating Method):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **48.7** lb/hour **3.9** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.9 g/hp-hr** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions for one generator.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **6.9 g/hp-hr**	4. Equivalent Allowable Emissions: **48.7** lb/hour **3.9** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII standards.**	
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 (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 (Description of Operating Method):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.03** lb/hour **0.003** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0015% S fuel oil** Reference: **FPL, 2008**	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions are for one generator.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0015% S fuel oil**	4. Equivalent Allowable Emissions: **0.03** lb/hour **0.003** tons/year
5. Method of Compliance: **Fuel vendor information**	
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 (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 (Description of Operating Method):	

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: **Particulate Matter - PM/PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **2.8** lb/hour **0.23** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.4 g/hp-hr** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions are for one generator.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.4 g/hp-hr**	4. Equivalent Allowable Emissions: **2.8** lb/hour **0.23** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII Standards.**	
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 (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 (Description of Operating Method):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **7.1** lb/hour **0.56** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1.0 g/hp-hr** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions are for one generator.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **1.0 g/hp-hr**	4. Equivalent Allowable Emissions: **7.1** lb/hour **0.56** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII Standards.**	
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 (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 (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **FDEP Rule 62-296.320(4)(b)1, F.A.C. requires 20 percent opacity. Excess emissions provided by Rule 62-210.700.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See Air Report** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See Air Report** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See Air Report** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

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.

EMISSIONS UNIT INFORMATION
Section [5]
Compressor Station

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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ 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. Description of Emissions Unit Addressed in this Section:
   Compressor Engines

3. Emissions Unit Identification Number: **5**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**2011**	**2013**	**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

   ☐ Hg Budget Unit

9. Package Unit:
   Manufacturer: **Caterpillar - 4 Stroke Lean-Burn** Model Number: **G3516 (7-units)**

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Includes 7 units rated at 1,340 hp.

EMISSIONS UNIT INFORMATION
Section [5]
Compressor Station

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Oxidation Catalyst**
2. Control Device or Method Code: **039**

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:

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: **10.11** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **40** feet	7. Exit Diameter: **1.0** Feet
8. Exit Temperature: **854**°F	9. Actual Volumetric Flow Rate: **7,651** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Table 2-8 in the Air Permit Application Report.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Natural gas**		
2. Source Classification Code (SCC):	3. SCC Units: **MMscf**	
4. Maximum Hourly Rate: **0.0099**	5. Maximum Annual Rate: **86.83**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly and annual are per unit. Annual rate based on 8,760 hr/yr operation.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO	039		EL
PM/PM_{10}			EL
NO_x			EL
SO_2			EL
VOC	039		EL

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.28** lb/hour **1.23** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.1 g/hp-h (with Oxidation Catalyst @ 95% control)** Reference: **Manufacturer's Specifications**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report; Table 2-8**	
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions presented per unit.**	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.10 g/hp-h**	4. Equivalent Allowable Emissions: **0.28** lb/hour **1.23** tons/year
5. Method of Compliance: **Manufacturer certification**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions presented per unit.**	

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):	

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):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **4.43** lb/hour **19.41** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1.5 g/hp-hr** Reference: **Manufacturer's Specifications**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report; Table 2-8**	
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions presented per unit.**	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **1.5 g/hp-hr**	4. Equivalent Allowable Emissions: **4.43** lb/hour **19.41** tons/year
5. Method of Compliance: **Manufacturer certification**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions presented per unit.**	

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):	

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):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.06** lb/hour **0.25** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **2 grains/100 scf** Reference: **FPL, 2008**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report, Table 2-8**	
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions are presented per unit.**	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2 grains/100 scf**	4. Equivalent Allowable Emissions: **0.06** lb/hour **0.25** tons/year
5. Method of Compliance: **Fuel vendor information**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions are presented per unit.**	

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):	

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):	

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: **Particulate Matter - PM/PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.101** lb/hour **0.44** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0099 lb/MMBtu** Reference: **Manufacturers Specificaitons**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report; Table 2-8**	
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions are presented per unit.**	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **10% Opacity**	4. Equivalent Allowable Emissions: **0.101** lb/hour **0.44**tons/year
5. Method of Compliance: **EPA Method 9**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions are presented per unit.**	

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):	

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):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.46** lb/hour **2.01** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.16 g/hp-hr (50% control with oxidation catalyst)** Reference: **Emissions based on EPA AP-42**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Air Report; Table 2-8**	
11. Potential, Fugitive, and Actual Emissions Comment: **Emissions are presented per unit.**	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.16 g/hp-hr**	4. Equivalent Allowable Emissions: **0.46** lb/hour **2.01** tons/year
5. Method of Compliance: **Manufacturer certification**	
6. Allowable Emissions Comment (Description of Operating Method): **Emissions are presented per unit.**	

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):	

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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **FDEP Rule 62-296.320(4)(b)1, F.A.C. requires 20 percent opacity. Excess emissions provided by Rule 62-210.700.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Proposed for PM/PM_{10} emissions.**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See Air Report** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See Air Report** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See Air Report** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **See Air Report** ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications – N/A

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

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.

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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ 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. Description of Emissions Unit Addressed in this Section:

   Diesel fire pump engine for emergency usage.

3. Emissions Unit Identification Number: **4**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**2011**	**2013**	**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

   ☐ Hg Budget Unit

9. Package Unit:
   Manufacturer: **TBD** Model Number: **TBD**

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    One diesel fire pump engine rated at 300 hp. Manufacturer and model number to be determined (TBD).

EMISSIONS UNIT INFORMATION
Section [6]
Diesel Fire Pump Engine

Emissions Unit Control Equipment/Method: Control **1** of **1**

1. Control Equipment/Method Description: **Good combustion practices - No. 2 fuel oil-fired.**
2. Control Device or Method Code: **N/A**

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:

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: **2.32** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **80** hours/year
6. Operating Capacity/Schedule Comment: **The diesel fire pump engine will normally be operated 1 to 2 hours per month for testing and maintenance. The fire pump engine will meet the requirements of 40 CFR Part 60 Subpart IIII.**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **17** feet	7. Exit Diameter: **0.79** Feet
8. Exit Temperature: **744**°F	9. Actual Volumetric Flow Rate: **1,750** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Table 2-7 in Air Permit Application Report.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Diesel fuel combustion**		
2. Source Classification Code (SCC):	3. SCC Units: **1,000 gallons**	
4. Maximum Hourly Rate: **0.017**	5. Maximum Annual Rate: **1.38**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.0015**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **135.1**
10. Segment Comment: **Maximum annual rate based on 80 hr/yr operation.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
PM/PM_{10}			EL
NO_x			EL
SO_2	Fuel Quality		EL
VOC			EL

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.7** lb/hour **0.07** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **2.6 grams per horsepower-hour (g/hp-hr)** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions are for one engine.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2.6 g/hp-hr**	4. Equivalent Allowable Emissions: **1.7** lb/hour **0.07** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII standards.**	
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 (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 (Description of Operating Method):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **4.5** lb/hour **0.18** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.8 g/hp-hr** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions for one engine.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **6.8 g/hp-hr**	4. Equivalent Allowable Emissions: **4.5** lb/hour **0.18** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII standards.**	
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 (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 (Description of Operating Method):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.004** lb/hour **0.00014** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0015% S fuel oil** Reference: **FPL, 2008**	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions are for one engine.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0015% S fuel oil**	4. Equivalent Allowable Emissions: **0.0036** lb/hour **0.00014** tons/year
5. Method of Compliance: **Fuel vendor information**	
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 (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 (Description of Operating Method):	

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: **Particulate Matter - PM/PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.26** lb/hour **0.011** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.4 g/hp-hr** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions are for one engine.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.4 g/hp-hr**	4. Equivalent Allowable Emissions: **0.26** lb/hour **0.011** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII Standards.**	
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 (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 (Description of Operating Method):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.66** lb/hour **0.026** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1.0 g/hp-hr** Reference:	7. Emissions Method Code: **2**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Annual emissions are for one engine.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **1.0 g/hp-hr**	4. Equivalent Allowable Emissions: **0.66** lb/hour **0.026** tons/year
5. Method of Compliance: **Manufacturer certification of Subpart IIII Standards.**	
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 (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 (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **FDEP Rule 62-296.320(4)(b)1, F.A.C. requires 20 percent opacity. Excess emissions provided by Rule 62-210.700.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See Air Report** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See Air Report** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See Air Report** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☒ Attached, Document ID: **See Air Report** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

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.

EMISSIONS UNIT INFORMATION
Section [7]
Temporary Construction 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.)

   ☒ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ 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. Description of Emissions Unit Addressed in this Section:

   Temporary Construction Boiler (to be used during construction period only).

3. Emissions Unit Identification Number: **2**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C		**October 1, 2008 through December 31, 2008**	**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

   ☐ Hg Budget Unit

9. Package Unit:
   Manufacturer: **Nebraska Boiler or equivalent** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION
Section [7]
Temporary Construction Boiler

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Low NOx burners**
2. Control Device or Method Code: **205**

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:

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: **110** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **150** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

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 Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: **19** feet	7. Exit Diameter: Feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **This temporary emission unit will only be used during the project construction period. Once the CCEC commences commercial operation, this unit will no longer be operated.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Natural gas**		
2. Source Classification Code (SCC):	3. SCC Units: **MMscf**	
4. Maximum Hourly Rate: **0.104**	5. Maximum Annual Rate: **15.64**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,055**
10. Segment Comment: **Maximum annual rate based on 500 hr/yr operation.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification 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 Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	Fuel Quality		NS
PM_{10}	Fuel Quality		NS
SO_2	Fuel Quality		EL
NO_x	205		EL
CO	Good Combustion		NS
VOC	Good Combustion		NS

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: **Particulate Matter Total - PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.77** lb/hour **0.19** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.007 lb/MMBtu x 110 MMBtu/hr =0.77 lb/hr** **0.77 lb/hr x 500 hr / 2,000 lb = 0.019 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **10% Opacity**	4. Equivalent Allowable Emissions: **0.77** lb/hour **0.19** tons/year
5. Method of Compliance: **EPA Method 9**	
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 (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 (Description of Operating Method):	

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: **Particulate Matter - PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.77** lb/hour **0.19** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.007 lb/MMBtu x 110 MMBtu/hr =0.77 lb/hr** **0.77 lb/hr x 500 hr / 2,000 lb = 0.19 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **10% Opacity**	4. Equivalent Allowable Emissions: **0.77** lb/hour **0.19** tons/year
5. Method of Compliance: **EPA Method 9**	
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 (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 (Description of Operating Method):	

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: **Sulfur Dioxide - SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.6** lb/hour **0.15** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **2 grains S/100 scf gas** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: 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:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2 grains S/100 scf gas**	4. Equivalent Allowable Emissions: **0.6** lb/hour **0.15** tons/year
5. Method of Compliance: **Fuel Sampling and Analysis**	
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 (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 (Description of Operating Method):	

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: **Nitrogen Oxides - NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **5.5** lb/hour **1.38** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.050 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.050 lb/MMBtu x 110 MMBtu/hr = 5.5 lb/hr** **5.5 lb/hr x 500 hr / 2,000 lb = 1.38 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.050 lb/MMBtu**	4. Equivalent Allowable Emissions: **5.5** lb/hour **1.38** tons/year
5. Method of Compliance: **EPA Method 7e or Vendor Certification**	
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 (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 (Description of Operating Method):	

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: **Carbon Monoxide - CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **8.8** lb/hour **2.20** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.080 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.080 lb/MMBtu x 110 MMBtu/hr = 8.8 lb/hr** **8.8 lb/hr x 500 hr / 2,000 lb = 2.20 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: **8.8** lb/hour **2.20** 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 (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 (Description of Operating Method):	

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: **Volatile Organic Compounds - VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.55** lb/hour **0.14** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 lb/MMBtu** Reference: **Emissions based on AP-42**	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.005 lb/MMBtu x 110 MMBtu/hr = 0.55 lb/hr** **0.55 lb/hr x 500 hr / 2,000 lb = 0.14 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment:	

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 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: **0.55** lb/hour **0.14** 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 (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 (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **FDEP Rule 62-296.320(4)(b)1, F.A.C., requires 20% opacity. Excess emissions provided by Rule 62-210.700(1) F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Proposed as emission limit for PM/PM_{10}.**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (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: **See EU 2** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (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: **See EU 2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (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: **See EU 2** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance 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: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☒ Attached, Document ID: **See EU 2** ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☒ Attached, Document ID: **See EU 2** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☒ Attached, Document ID: **See EU 2** ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☒ Attached, Document ID: **See EU 2** ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

AIR CONSTRUCTION PERMIT
APPLICATION REPORT

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LIST OF ACRONYMS

°C	degrees Celsius
°F	degrees Fahrenheit
$\mu g/m^3$	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AERMOD	American Meteorological Society and U.S. Environmental Protection Agency Regulatory Model
AOR	Annual Operating Report
AQRV	air quality-related value
BACT	Best Available Control Technology
BPIP	Building Profile Impact Program
Btu/lb	British thermal unit per pound
CAA	Clean Air Act
CEM	continuous emissions monitoring
cf/yr	cubic foot per year
CFR	Code of Federal Regulations
CO	carbon monoxide
CT	combustion turbine
DLN	dry low-NO_x
EPA	U.S. Environmental Protection Agency
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FPL	Florida Power & Light
g/bhp-hr	grams per brake horsepower-hour
g/s	grams per second
GEP	Good Engineering Practice
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
HHV	high heating value
hp	horsepower
hr/yr	hours per year
HRSG	heat recovery steam generator
HSH	highest, second-highest
KPBI	Palm Beach International Airport
km	kilometer
lb/hr	pound per hour
lb/MMBtu	pound per million British thermal unit
lb/MW-hr	pound per megawatt-hour
LHV	low heating value

m	meter
MACT	Maximum Available Control Technology
MMBtu/hr	million British thermal units per hour
MMcf/hr	million cubic feet per hour
MPS	Mitsubishi Power Systems
MW	megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
NP	National Park
NSPS	New Source Performance Standards
NSR	New Source Review
NWA	National Wildlife Area
NWS	National Weather Service
O_2	oxygen
PM	particulate matter
PM_{10}	particulate matter less than 10 microns
ppb	parts per billion
ppm	parts per million
ppmvd	parts per million by volume dry
PSD	Prevention of Significant Deterioration
psia	pound per square inch absolute
psig	pound per square inch gauge
QA/QC	quality assurance/quality control
RBEC	Riviera Beach Energy Center
SAM	sulfuric acid mist
scf/yr	standard cubic foot per year
SCR	selective catalytic reduction
SCRAM	Support Center for Regulatory Air Models
SER	significant emission rate
SO_2	sulfur dioxide
TPY	tons per year
TSP	total suspended particulate
TTN	Technology Transfer Network
USGS	U.S. Geological Survey
WCEC	West County Energy Center

1.0 INTRODUCTION

Florida Power & Light Company's (FPL's) existing Riviera Plant consists of two nominal 300-megawatt (MW) fossil-fuel fired steam generating units. Units 1 and 2 started operating in 1946 and 1953, respectively. Both units were permanently retired and removed from the Site. The commercial in-service dates for Units 3 and 4 were 1962 and 1963, respectively, and they have remained in service since that time. The units are authorized pursuant to Florida Department of Environmental Protection (FDEP) Final Title V Permit No. 09900042-004-AV to operate on natural gas, No. 6 fuel oil, and No. 2 fuel oil. Each unit has a heat input of 3,050 million British thermal units per hour (MMBtu/hr) on oil and 3,260 MMBtu/hr on natural gas. The air emissions from each unit are exhausted through two separate 298-foot stacks. The general location of the existing Plant is shown in Figure 1-1.

FPL proposes to convert the existing Riviera Plant into a modern, highly efficient, lower-emission next-generation clean energy center using the latest combined cycle technology. The converted Plant, referred to as the Riviera Beach Energy Center (RBEC), will consist of a nominal 1,250-MW "3-on-1" combined cycle unit. RBEC will be located within the existing Site boundaries.

There will be significant benefits associated with RBEC. The converted Plant will be more energy efficient and provide cleaner energy to FPL's customers. The converted Plant will have a nominal generating capacity of 1,250 MW at a location where a nominal 600 MW is now generated. RBEC will use at least 33 percent less fuel for an equivalent amount of energy production than the existing Plant. Moreover, RBEC will be capable of producing about 100 percent more power based on anticipated summer capacities.

With the converted Plant, there will also be significant net reductions in air emissions due to the retirement of Units 3 and 4. For example, actual emissions of sulfur dioxide (SO_2), particulate matter (PM), and nitrogen oxides (NO_x) emissions will be reduced by more than 90 percent. In addition, there will be significant benefits in ambient air quality as a result of these emission reductions.

Decommissioning and dismantlement of the existing generation units will be required prior to the construction of RBEC. Therefore, there will be no overlap of operation between the existing units and the converted Plant, which is anticipated to have an in-service date of June 2014.

This Air Construction Permit Application consists of the retirement of the existing Units 3 and 4 and conversion of the existing Plant into one nominal 1,250-MW "3-on-1" combined cycle unit. The "3-on-1" unit will consist of three nominal 250-MW advanced combustion turbines (CTs) and three heat recovery steam generators (HRSGs), which will utilize the waste heat from the CTs to produce steam to be utilized in a single steam turbine generator. The CTs being considered for the converted Plant include the Mitsubishi Power Systems (MPS) "G" Class or equivalent MPS CTs. The MPS "G" Class CTs consist of the 501G (M501G1 as authorized for the West County Energy Center), the updated MPS "G" Class CTs referred to as "G3" (501G3), and the MPS 501G1PLUS and the Siemens Power Generation, Inc. "H" Class CT. The information presented in this application for the MPS 501 "G" Class envelopes the performance and emissions for the three MPS CTs and equivalent MPS CTs. Duct burners are proposed for each HRSG and are fired during peak demand periods to achieve the total nominal generating capacity. Duct firing will be limited to an equivalent of 2,880 hours per CT per year at the maximum firing rate.

Each CT will utilize evaporative cooling for inlet air cooling. Evaporative cooling systems achieve adiabatic cooling using water in the form of water evaporated from a treated paper material. The evaporated water extracts the latent heat of vaporization from the inlet air stream when the water droplet is converted to water vapor. Heat is removed at a rate of 1,075 British thermal units per pound (Btu/lb) of water. The result is a cooler, more dense and moisture-laden air stream. This allows additional power to be produced. The CTs will use natural gas as the primary fuel with ultra low-sulfur distillate "light oil" used as a backup fuel for up to the equivalent of 1,000 hours per year (hr/yr) per CT at baseload conditions. The HRSG duct burners will fire natural gas only. Gas for RBEC will be transported to the Site via pipeline. No onsite storage will be provided for natural gas. Gas compressors will be installed on the Site to raise the gas pressure to the appropriate level for the CTs. The natural gas heat content is typically about 21,000 Btu/lb [lower heating value (LHV)] with a maximum sulfur content of 2 grains per 100 standard cubic feet (gr/100 scf) of gas. The heat content of ultra low-sulfur light oil is typically about 18,400 Btu/lb (LHV) with a maximum sulfur content of 0.0015 percent by weight. Ultra low-sulfur light oil will be delivered to the Site by truck or pipeline and will be stored in a new fuel oil storage tank.

U.S. Environmental Protection Agency (EPA's) Prevention of Significant Deterioration (PSD) regulations are promulgated under 40 Code of Federal Regulations (CFR), Part 51.166. Florida's PSD regulations are codified in Rules 62-212.400, Florida Administrative Code (F.A.C.) and have been approved by EPA. The Florida PSD regulations incorporate the requirements of EPA's PSD

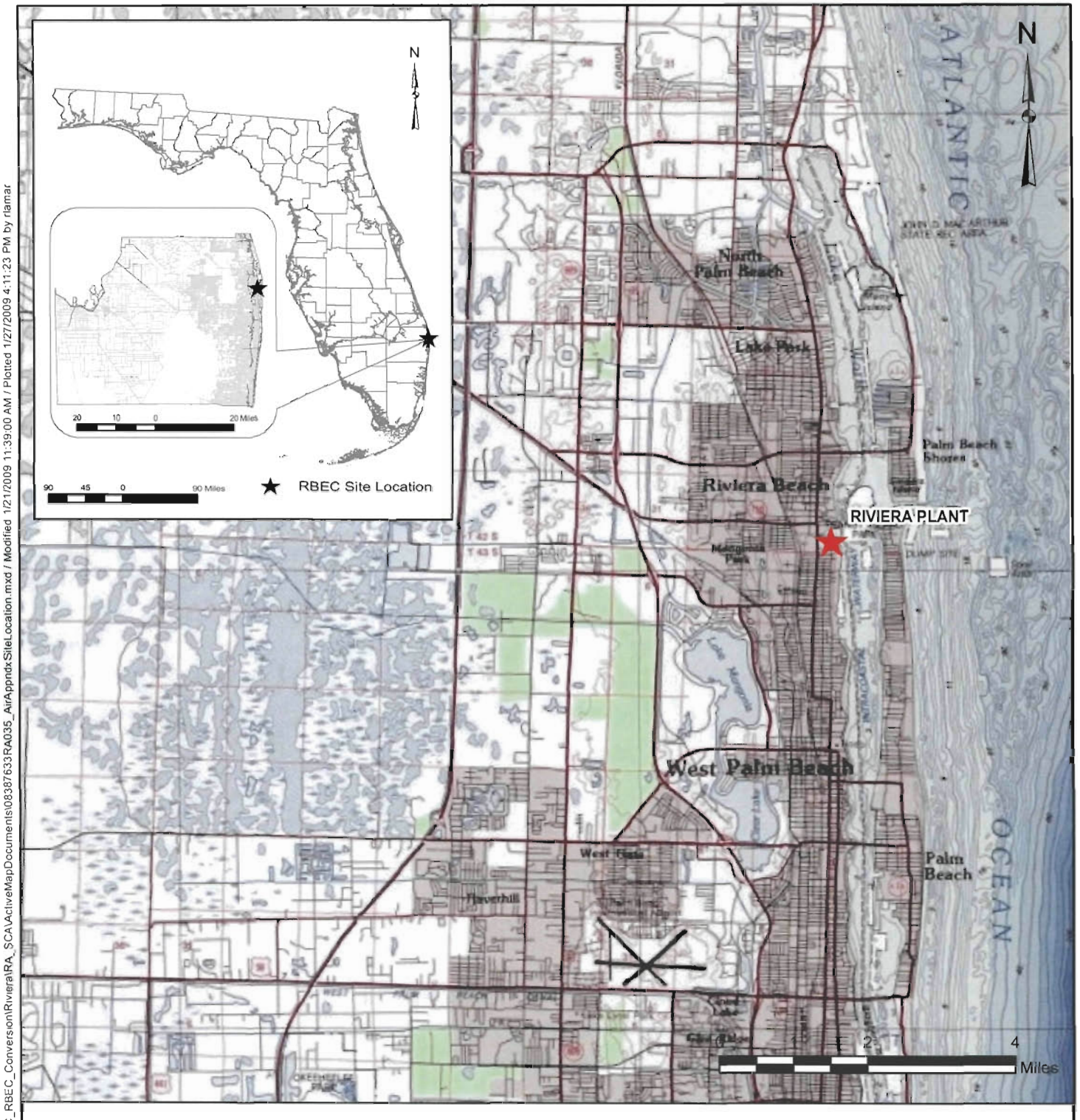
regulations. Under these requirements, the existing Riviera Plant is classified as an existing major facility. A modification to an existing major facility that results in a significant net emissions increase equal to or exceeding the significant emissions rates (SER) listed in the State of Florida regulations under Section 62-212.400, Table 62-212.400-2, F.A.C., is classified as a major modification and will be subject to the PSD preconstruction permitting program for those pollutants that exceed the PSD SERs.

The procedures for determining applicability of the PSD permitting program to RBEC are specified in Rule 62-212.400(2), F.A.C. For each regulated pollutant, PSD is triggered as a result of a modification at an existing facility if the difference between the projected actual emissions and the baseline actual emissions equals or exceeds the SER for that pollutant, as defined at Rule 62-210.200(243), F.A.C.

As discussed previously, there will be significant reductions in air emissions for the converted Plant. The net changes in air emissions, as presented in Section 2, will not exceed the PSD significant emission rates for any of the criteria pollutants subject to PSD review. Therefore, pursuant to Florida Rule 62-212.400, PSD review is not applicable for any air pollutants for the Project.

This Air Construction Permit Application Report is divided into six major sections. This Application is being filed for the purpose of establishing federally-enforceable emission limitations that insure the Project will not result in a significant net increase in emissions of any regulated air pollutant, in accordance with FDEP's federally-approved minor source air construction permit program under Florida's federally-required State Implementation Plan:

- Section 2.0 presents a description of RBEC, including air emissions and stack parameters.
- Section 3.0 provides a review of the regulatory analysis conducted, including PSD and nonattainment requirements, applicable to RBEC.
- Section 4.0 includes the control technology review.
- Section 5.0 discusses the ambient air monitoring analysis.
- Section 6.0 presents a summary of the air modeling approach and results used in assessing compliance of the existing and converted Plants with ambient air quality standards (AAQS).



REFERENCES

1 Topographic Imagery, Quad name, Riviera Beach. Quad number, 2301. Date 1983. Quad name, Palm Beach. Quad number 2201. Date 1983. USGS.

FPL		SCALE	AS SHOWN
		DATE	1/21/2009
		DESIGN	RCM
		GIS	NRL
FILE No.	08387633RA035	CHECK	RCM
PROJECT No.	083-87633 REV. 2	REVIEW	KFK

LOCATION OF THE FPL RIVIERA PLANT IN PALM BEACH COUNTY, FLORIDA

FPL
RIVIERA BEACH ENERGY CENTER

FIGURE 1-1

2.0 PROJECT DESCRIPTION

2.1 Site Description

The existing FPL Riviera Plant Site (Site), located primarily within the City of Riviera Beach with a small portion in the City of West Palm Beach, is southwest of the Lake Worth Inlet and Peanut Island and across the Intracoastal Waterway from Palm Beach, Florida, and will serve as the Site for RBEC. The Site is situated east of U.S. Highway 1, south of the Port of Palm Beach, north of 59th Street, and west of Lake Worth Lagoon (Intracoastal Waterway). Figure 2-1 presents the Site plan for RBEC.

2.2 Proposed Combustion Turbines

RBEC will be configured as a 3-on-1 combined cycle unit. The CTs (any of the four models under consideration) will use dry low-NO_x (DLN) combustion technology when firing natural gas and water injection when firing light oil to minimize NO_x formation. Selective catalytic reduction (SCR) will be installed in each HRSG to further reduce emissions of NO_x. Natural gas will be used as the primary fuel and light oil will be used as a backup fuel. Light oil usage will be limited to the equivalent of 1,000 hr/yr per CT at full load.

The generating capacity of a combined cycle plant is affected by ambient temperature, with increased temperature resulting in less efficient electric production. Greater overall fuel consumption will occur at lower ambient temperatures. For the purpose of calculating maximum hourly fuel use quantities representative of a nominal 1,250-MW combined cycle unit, the following specific operating conditions were used for the CTs (see Appendix A):

- 35 degrees Fahrenheit (°F) dry-bulb turbine inlet temperature,
- 14.67 pound per square inch absolute (psia) barometric pressure, and
- 20,909-Btu/lb and 918 Btu/scf heating value (LHV) of natural gas and 18,387-Btu/lb and 129,900 Btu/gallon heating value (LHV) for ultra low-sulfur light oil.

The maximum heat input ranges from 2,421 MMBtu/hr (LHV) to 2,509 MMBtu/hr (LHV) for the CTs being considered for RBEC when firing natural gas (100-percent capacity, 35°F). The corresponding maximum fuel usage ranges from about 2.6 million to 2.7 million cubic feet per hour (MMcf/hr) of natural gas. Maximum potential fuel usage at 59°F turbine inlet temperature would

range from about 6.6×10^{10} to 6.9×10^{10} cubic feet per year (cf/yr) of natural gas for three CTs for each of the four different model types under consideration.

The HRSG duct burners associated with each CT/HRSG train will have a maximum firing rate of 475 MMBtu/hr [high heating value (HHV)] or 428 MMBtu/hr (LHV). The HRSG duct burner maximum heat input rate will be the same for each CT being considered for the converted Plant. The maximum annual fuel usage for the duct burners is based on 2,880 hr/yr per HRSG at this heat input. The maximum potential annual fuel usage for the duct burners is calculated to be about 4 billion standard cubic feet per year (scf/yr).

Ultra low-sulfur light oil use will be limited to the equivalent of 1,000 hr/yr per CT at full load. The maximum fuel use is up to 17,500 gallons/hr/CT at 59°F turbine inlet and would require an annual usage of about 52 million gallons for three CTs each operating for 1,000 hours and a turbine inlet temperature of 59°F.

2.3 Proposed Source Emission Units and Stack Parameters

RBEC's air emission units are:

- 3 CT/HRSGs, with duct burners when firing natural gas;
- Fuel heater;
- Emergency generators;
- Auxiliary boiler (for the MPS 501G CTs only);
- Fire pump engine;
- Fuel oil storage tank; and
- Compressor station.

Each of these emission units is discussed in the following paragraphs.

Performance, estimated maximum hourly emissions and exhaust information representative of each CT/HRSG option operating at base-load conditions (100-percent load) in combined cycle mode are presented in Tables 2-1 and 2-2 for natural gas and light oil firing, respectively. Tables 2-1 and 2-2 are presented as versions "A" and "B", which are representative of the MPS 501G or equivalent and Siemens H Class CT models, respectively. Tables 2-1A and 2-1B also include emissions and exhaust information for duct firing. The data are presented for a turbine inlet temperature of 59°F. The

performance and emissions data for the other operating conditions are given in Appendix A for turbine inlet temperatures of 35°F, 59°F, 75°F, and 95°F and various operating conditions (100-percent load and 75-percent load operation applicable for each CT Class).

Maximum potential annual emissions for the CTs/HRSGs for regulated air pollutants are based on an ambient temperature of 59°F. To produce the maximum annual emissions, it is assumed that each CT/HRSG would operate for 8,760 hours. Of the 8,760 operating hours, an average of 7,760 hr/yr are assumed to be natural gas-firing with 2,880 hours fired at 100-percent load with maximum duct firing. For the remaining average of 1,000 hr/yr, it is assumed that the CTs are operated on light oil with the exception of VOC emissions for the MPS 501G CTs.

For VOC emissions for the MPS 501G CTs, a plant-wide emission cap of 99.1 TPY is proposed (i.e., a net increase of 39.7 TPY) to ensure the Project will not result in a significant net increase in VOC emissions. Given the conservative nature of the emission estimates (100 percent capacity factors for all emission units; 59°F turbine inlet) and the potential variability of operating conditions, FPL proposes a plant-wide VOC emission cap. To retain maximum operating flexibility due to this conservatism, it is possible that in any given year, all of the CTs could fire oil for an equivalent of 1,000 hr/yr and the compressors could operate without limitations, yet total VOC emissions would still be below the proposed emission cap. Since for every hour of CT oil firing, the compressor station would operate less, there would be lower actual emissions from the compressor station. For the purposes of comparison with the significant emission rate, the VOC emissions for RBEC are capped at 99.1 TPY (see Table 2-9A). However, individual emission units in this summary table (i.e., the CTs and compressor engines) are presented at their maximum potential emissions. Because of the conservative nature of the emission estimates, FPL believes that actual RBEC emissions would be below a VOC plant-wide emission cap even if 1,000 hr/yr per CT of oil firing were realized. FPL proposes to implement a plant-wide VOC emission cap and to track and report annual VOC emissions from RBEC in accordance with 40 CFR 52.21(b)(33), which is adopted and incorporated by reference in Rule 62-204.800, F.A.C.

Since the ultra low-sulfur content (0.0015 percent) light oil has lower fuel sulfur content than that assumed for natural gas (2 gr/100 scf), the maximum annual SO_2 and sulfuric acid mist (SAM) emissions are based on 8,760 hours of operation firing natural gas. Tables 2-3A and 2-3B present the maximum potential annual emissions for the range of operating conditions for each CT Class being considered for RBEC.

A process flow diagram of the proposed CT/HRSG configuration, operating at base load conditions with a compressor inlet temperature of 59°F, is presented in Figure 2-2.

During combustion, two primary types of NO_x are formed: fuel NO_x and thermal NO_x. Fuel NO_x emissions are formed through the oxidation of a portion of the nitrogen contained in the fuel. Thermal NO_x emissions are generated through the oxidation of a portion of the nitrogen contained in the combustion air. NO_x formation can be limited by lowering combustion temperatures (through water or steam injection) and/or staging combustion (a reducing atmosphere followed by an oxidizing atmosphere, known as dry NO_x control). Emissions of NO_x for the CTs, equipped with SCR control systems are proposed at concentrations of 2.0 parts per million-dry conditions (ppmvd), corrected to 15-percent oxygen (O_2) or less when firing natural gas and 8 ppmvd corrected to 15-percent O_2 or less when firing ultra low-sulfur light oil.

Carbon monoxide (CO) is formed by incomplete combustion of fuel. High combustion temperatures, adequate excess air, and good fuel/air mixing during combustion will minimize CO formation. CO formation is limited by ensuring complete efficient combustion of the fuel in the turbines. Recent improvements in CT combustor technology allow for both reduced NO_x emissions and low CO emissions.

The proposed CO emission rates for the MPS CTs when firing natural gas are 4.1 ppmvd corrected to 15-percent O_2 at baseload operation and 7.6 ppmvd corrected to 15-percent O_2 with maximum duct firing. For the Siemens H CTs, the proposed CO emission rates when firing natural gas are 5 ppmvd corrected to 15-percent O_2 at baseload operation and 7.2 ppmvd corrected to 15-percent O_2 with maximum duct firing.

The proposed CO emission rates for oil-firing at baseload conditions are 8 ppmvd corrected to 15-percent O_2 for the MPS CTs and 10 ppmvd corrected to 15-percent O_2 for the Siemens H CTs.

SO_2 emission rates are controlled and minimized by the very low sulfur content in the fuels, which will be a maximum of 2 grains sulfur/100 scf for natural gas and 0.0015-percent sulfur by weight for ultra low-sulfur light oil.

An auxiliary boiler will be used with the MPS 501G1 and MPS 501G1PLUS CTs, as necessary, for startup. The combustor requires steam for combustor cooling, which normally comes from the

HRSG. The limited-use auxiliary boiler will have a maximum heat input of 99.8 MMBtu/hr firing natural gas. Table 2-4 presents performance and emissions information for the auxiliary boiler.

RBEC will be equipped with two, 100-percent capability, 2,250-kW emergency generators firing ultra low-sulfur light oil. These emergency generators will be used when electric power is not available. This primarily would occur during catastrophic events such as hurricanes. Table 2-5 contains emissions and manufacturer's information for the emergency generators proposed for the converted Plant. Normally these emergency generators would be operated 1 to 2 hours per month for maintenance and reliability testing.

RBEC will include one natural gas-fired fuel heater and a spare. These heaters will utilize a heat transfer fluid for heating the natural gas and be fired with only natural gas. These heaters will have a maximum heat input rate of 10 MMBtu/hr or less and will be used as necessary to heat natural gas above the dew point. Only one fuel heater will be necessary for the operation of RBEC. Table 2-6 contains performance and emissions information for the fuel heaters.

RBEC will be equipped with a 300-horsepower (hp) fire pump engine using ultra low-sulfur light oil. This engine will be used when necessary during catastrophic events such as fires. Table 2-7 presents emissions and manufacturer's information for the fire pump engine proposed for the converted Plant. Normally, this fire pump engine would be operated only 1 to 2 hours per month for maintenance and reliability testing.

RBEC may also include a gas compressor station at the Site to increase pressure from the existing FGT lateral to the CTs. The gas compressor station would include up to 7 gas compressors, which will be fired by natural gas and be equipped with oxidation catalysts to reduce the emissions of CO and VOCs. Table 2-8 presents performance and emissions information for the gas compressors.

Ultra low-sulfur light oil will be either trucked or barged to the Site and stored in a new fuel oil tank at the Site. This tank is a vertical fixed roof design, with a rated storage capacity of approximately 6.3 million gallons (150,000 barrels). Appendix A provides performance and emissions information for the fuel oil storage tank.

2.4 Annual Emissions for the Converted Plant Including Emission Reductions from the Existing Plant

The maximum annual potential emissions for RBEC include air emissions from the CT/HRSGs, fuel heater, emergency generators, auxiliary boiler, fire pump engine, fuel oil storage tank and gas compressor station. Tables 2-9A and 2-9B present the maximum annual potential RBEC emissions with the MPS 501G or equivalent and Siemens H CTs, respectively. These tables address the criteria pollutants, as required under new source review.

In addition, maximum annual potential hazardous air pollutants (HAPs) emissions are presented in Table 2-10 for the MPS 501G and Siemens H CTs. Additional detail on the HAP emission calculations is also presented in Appendix A. RBEC will not be a major source of HAP emissions, since maximum potential emissions are not projected to exceed 10 tons per year (TPY) of a single HAP, nor exceed 25 TPY for all HAPs.

Annual emissions were based on maximum emissions for baseload operation and ambient temperatures of 59°F. The maximum emissions are based on 7,760 hours firing natural gas and 1,000 hours per year firing oil, except for VOC emissions for the MPS 501G CTs, as discussed earlier, in Section 2.3 for which a plant-wide VOC emission cap is proposed. Natural gas firing includes 2,880 hours with maximum duct firing. The potential emissions are based on the 59°F turbine inlet temperature at 100-percent load condition since it represents a conservative average when the annual average temperatures are slightly higher than 70°F.

Tables 2-9A and 2-9B compare the net emission changes due to the Project, reflecting the maximum RBEC emissions as well as the emission reductions from retirement of the existing Riviera Plant, to the PSD significant emission rates. The PSD significant emission rates are the emission thresholds to determine if PSD review will be required for modifications to major sources. The historical actual emissions for the existing Riviera Plant that are presented in these tables were determined pursuant to FDEP PSD Rules, specifically Rule 62-212.400 (2)(a)1., F.A.C. Five years (2003 through 2007) of historical emission data were evaluated to determine historical actual emissions using the highest 2-year average emissions for each pollutant. Historical actual emissions are based on past Annual Operating Reports (AORs), which are presented in a series of tables in Appendix B for each unit for each year. In Tables 2-9A and 2-9B, the net emission changes (i.e., projected maximum potential emissions minus historical actual emissions) are compared to the PSD significant emission rates. If the PSD significant emission rate for a pollutant is not exceeded by this comparison, PSD review is

not required for that pollutant. This Application is being filed for the purpose of establishing federally-enforceable emission limitations that insure RBEC will not result in a significant net increase in emissions of any regulated air pollutant, in accordance with FDEP's federally-approved minor source air construction permit program under Florida's federally-required State Implementation Plan. As stated earlier in this report, FPL proposes to implement a plant-wide VOC emission cap with the MPS 501G CTs and to track and report annual VOC emissions from RBEC in accordance with 40 CFR 52.21(b)(33), which is adopted and incorporated by reference in Rule 62-204.800, F.A.C.

As shown in these tables, there are significant emission reductions for most pollutants. For SO_2, PM, particulate matter less than 10 microns (PM_{10}), and NO_x, annual emissions will be reduced by more than 90 percent with the converted Plant. Although annual VOC emissions will increase slightly, the change will be less than the PSD significant emission rate.

The net emission reductions for SO_2, NO_x, and PM_{10} as a result of the converted Plant are also graphically depicted in Figures 2-3 and 2-4. Figure 2-3 provides a graphical comparison of historical actual annual emissions (i.e., TPY) from the existing Riviera Plant with the projected maximum potential emissions resulting from RBEC. Figure 2-4 compares the maximum potential emission rates for RBEC with historical actual emission rates based on the amount of energy produced [i.e., a comparison on a pound per megawatt hour (lb/MW-hr) basis].

Significant reductions are shown to result from the converted Plant for emissions of SO_2, NO_x, and PM_{10}. This is in spite of the fact that historical actual emissions are based on a capacity factor of just over 40 50 percent, while projected emissions for RBEC are based on a 100 percent capacity factor. In addition, the converted Plant will have a nominal generating capacity of 1,250 MW at a location where a nominal 600 MW is now generated. The plant will use at least 33 percent less fuel for an equivalent amount of energy production. Moreover, it will be capable of producing about 100 54 percent more power based on anticipated summer capacities.

Based on this evaluation, the net emission changes for the converted Plant are less than the PSD significant emission rates for all pollutants. As such, PSD review is not required for RBEC. Nevertheless, as discussed in Section 4.0, the air emission controls are representative of best available control technology (BACT) emission limits that have been determined under PSD regulations for other similar combined cycle units [e.g., PSD-FL-396, July 30, 2008, for West County Energy Center (WCEC) Unit 3].

2.5 Site Layout, Structures, and Stack Sampling Facilities

A plot plan of RBEC is presented in Figure 2-1 for the 3-on-1 combined cycle configuration. North-south and east-west profiles of the CT/HRSG train are presented in Figures 2-5 and 2-6, respectively. The dimensions of the buildings and structures are presented in Section 6.0. Stack sampling facilities will be constructed in accordance with Rule 62-297.310(6), F.A.C.

2.6 Excess Emissions

The startup and shutdown and fuel changes in combined cycle operation will require an excess emission allowance greater than the 2 hours provided under the FDEP rules. During cold startup, the operating load of the CTs is limited by the amount of steam that can be accepted by the steam turbine. This will result in excess emissions. The same excess emission allowance is requested for RBEC that was authorized for the WCEC Project. The combined cycle units associated with these facilities have similar steam turbines that receive steam during startup (i.e., nominal 500 MW). The proposed condition follows:

> *"Excess Emissions Allowed: As specified in this condition, excess emissions resulting from startup, shutdown, oil-to-gas fuel switches and documented malfunctions are allowed provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. A "documented malfunction" means a malfunction that is documented within 1 working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail. For each gas turbine/HRSG system, excess emissions resulting from startup, shutdown, or documented malfunctions shall not exceed 2 hours in any 24-hour period except for the following specific cases.*
>
> *a. For cold startup of the steam turbine system, excess emissions from any gas turbine/HRSG system shall not exceed eight (8) hours in any 24-hour period. Cold startup of the steam turbine system shall be completed within 12 hours. A cold "startup of the steam turbine system" is defined as startup of the 3-on-1 combined cycle system following a shutdown of the steam turbine lasting at least 48 hours. {Permitting Note: During a cold startup of the steam turbine system, each gas turbine/HRSG system is sequentially brought on line at low load to gradually increase the temperature of the steam-electrical turbine and prevent thermal metal fatigue. Note that shutdowns and documented malfunctions are separately regulated in accordance with the requirements of this condition.}*
>
> *b. For shutdown of the steam turbine system, excess emissions from any gas turbine/HRSG system shall not exceed three hours in any 24-hour period.*
>
> *c. For cold startup of a gas turbine/HRSG system, excess emissions shall not exceed 4 hours in any 24-hour period. "Cold startup of a gas turbine/HRSG system" is defined as a startup after the pressure in the high-pressure steam*

drum falls below 450 pound per square inch gauge (psig) for at least a 1-hour period.

d. *For fuel switching excess emissions shall not exceed 2 hours in any 24-hour period.*

Ammonia injection shall begin as soon as operation of the gas turbine/HRSG system achieves the operating parameters specified by the manufacturer. As authorized by Rule 62-210.700(5), F.A.C., the above conditions allow excess emissions only for specifically defined periods of startup, shutdown, fuel switching, and documented malfunction of the gas turbines. [Design; Rules 62-212.400(BACT) and 62-210.700, F.A.C.]"

2.7 Siemens H CT Commissioning

The regulatory requirement for initial compliance determinations for NSPS units is as follows:

Initial compliance tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of the unit.

The proposed model turbine would be the first Siemens H turbine designed and manufactured for 60Hz operation. During commissioning of the Siemens H CTs for the Project, the first CT in the 3-on-1 configuration will undergo comprehensive commissioning and validation tests using a separate exhaust stack. This commissioning will require an extension of the requirements for initial testing of the first gas turbine to allow for an initial test period of up to three months. This first gas turbine will then be shut down for a month, undergo an inspection outage, and then may receive some new combustion components to be prepared for combined cycle operation. The entire 3-on-1 block will then go into normal startup activities that will be on the order of up to 180 days. Therefore, the maximum testing period required is three months, which would be in addition to normal start-up activities. Following testing, a short outage would occur for inspection and removal of the temporary stack, installation of the HRSG transition duct, then resumption of normal commissioning tests.

2.8 Construction Boiler

A temporary auxiliary boiler, rated at approximately 110 MMBtu/hr, will be brought onsite for use only during the construction of RBEC. The boiler will provide steam for HRSG cleaning and associated steam blows. The boiler will be fired with natural gas only and is expected to operate for no more than 500 hours per year. The boiler will be permanently shut down and removed once the RBEC commences commercial operation. As this boiler will have no affect on the total project

emissions once commercial operation commences, its emissions are not included in any of the project emissions summary tables. However, the boiler is fully described as Emission Unit 7 in the attached air application forms.

TABLE 2-1A
STACK, OPERATING, AND EMISSION DATA FOR THE COMBUSTION TURBINES/HRSGS AND DUCT BURNERS -NATURAL GAS COMBUSTION, MPS 501G CLASS CT

		Operating and Emission Data [a] for Ambient Temperature							
		Combustion Turbine/ HRSG				Combustion Turbine/ HRSG/ Duct Burner			
Parameter		**35 °F**	**59 °F**	**75 °F**	**95 °F**	**35 °F**	**59 °F**	**75 °F**	**95 °F**
CT/HRSG Stack Data (feet)					Compressors				
Height		149	149	149	149	149	149	149	149
Diameter		22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
100 Percent Load									
Temperature (°F)		196	195	195	195	186	185	185	184
Velocity (ft/sec)		63.1	60.9	59.1	57.3	62.6	60.3	58.6	56.7
Maximum Hourly Emissions per CT									
SO_2	lb/hr	15.6	15.0	14.5	14.0	18.3	17.6	17.1	16.6
PM/PM_{10}	lb/hr	8.1	7.4	7.2	6.9	11.7	11.0	10.8	10.5
NO_x	lb/hr	20.1	19.3	18.7	18.0	23.6	22.8	22.1	21.5
CO	lb/hr	25.1	24.1	24.0	23.0	54.5	52.7	52.0	50.3
VOC (as methane)	lb/hr	4.2	4.1	4.0	3.8	6.6	6.4	6.2	6.0
Sulfuric Acid Mist	lb/hr	3.0	2.9	2.8	2.7	4.0	3.8	3.7	3.6
75 Percent Load									
Temperature (°F)		184	185	186	187	NA	NA	NA	NA
Velocity (ft/sec)		50.4	48.7	47.4	46.0	NA	NA	NA	NA
Maximum Hourly Emissions per CT									
SO_2	lb/hr	12.0	11.5	11.1	10.6	NA	NA	NA	NA
PM/PM_{10}	lb/hr	6.2	6.0	5.9	5.8	NA	NA	NA	NA
NO_x	lb/hr	15.5	14.8	14.3	13.7	NA	NA	NA	NA
CO	lb/hr	48.0	45.5	44.0	42.0	NA	NA	NA	NA
VOC (as methane)	lb/hr	3.2	3.1	3.0	2.9	NA	NA	NA	NA
Sulfuric Acid Mist	lb/hr	2.34	2.23	2.16	2.06	NA	NA	NA	NA

[a] Refer to Appendix A for detailed information on basis of pollutant emission rates and operating data. Duct firing is assumed for 100% operating load. No duct firing is assumed for loads less than 100%.

Sources: MPS, 2008; Golder, 2008.

TABLE 2-1B
STACK, OPERATING, AND EMISSION DATA FOR THE COMBUSTION TURBINES/HRSGS AND DUCT BURNERS -NATURAL GAS COMBUSTION, SIEMENS H CT

		Operating and Emission Data [a] for Ambient Temperature							
		Combustion Turbine/ HRSG				Combustion Turbine/ HRSG/ Duct Burner			
Parameter		**35 °F**	**59 °F**	**75 °F**	**95 °F**	**35 °F**	**59 °F**	**75 °F**	**95 °F**
CT/HRSG Stack Data (feet)									
Height		149	149	149	149	149	149	149	149
Diameter		22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
100 Percent Load									
Temperature (°F)		196	195	195	195	186	185	185	184
Velocity (ft/sec)		61.3	59.0	57.0	54.9	60.8	58.5	56.5	54.3
Maximum Hourly Emissions per CT									
SO_2	lb/hr	15.1	14.4	13.9	13.3	17.7	17.1	16.5	16.0
PM/PM_{10}	lb/hr	13.3	13.0	12.2	11.7	17.0	16.4	15.8	15.3
NO_x	lb/hr	20.0	19.1	18.4	17.6	23.5	22.6	21.9	21.1
CO	lb/hr	30.0	29.0	28.0	27.0	49.0	48.0	47.0	46.0
VOC (as methane)	lb/hr	5.1	4.8	4.7	4.5	7.4	7.2	7.0	6.8
Sulfuric Acid Mist	lb/hr	2.9	2.8	2.7	2.6	3.8	3.7	3.6	3.5
75 Percent Load									
Temperature (°F)		184	185	186	187	NA	NA	NA	NA
Velocity (ft/sec)		49.3	47.3	45.8	43.9	NA	NA	NA	NA
Maximum Hourly Emissions per CT									
SO_2	lb/hr	12.1	11.4	10.9	10.2	NA	NA	NA	NA
PM/PM_{10}	lb/hr	11.0	11.0	9.9	9.4	NA	NA	NA	NA
NO_x	lb/hr	16.1	15.0	14.4	13.5	NA	NA	NA	NA
CO	lb/hr	49.0	46.0	44.0	41.0	NA	NA	NA	NA
VOC (as methane)	lb/hr	4.1	3.8	3.6	3.4	NA	NA	NA	NA
Sulfuric Acid Mist	lb/hr	2.36	2.21	2.11	1.99	NA	NA	NA	NA

[a] Refer to Appendix A for detailed information on basis of pollutant emission rates and operating data. Duct firing is assumed for 100% operating load. No duct firing is assumed for loads less than 100%.

Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE 2-2A
STACK, OPERATING, AND EMISSION DATA FOR THE COMBUSTION TURBINES/HRSGS - ULTRA LOW-SULFUR LIGHT OIL COMBUSTION, MPS 501G CLASS CT

		Operating and Emission Data [a] for Ambient Temperature Combustion Turbine/ HRSG			
Parameter		**35 °F**	**59 °F**	**75 °F**	**95 °F**
CT/HRSG Stack Data (feet)					
Height		149	149	149	149
Diameter		22	22	22	22
100 Percent Load					
Temperature (°F)		359	357	355	354
Velocity (ft/sec)		79.4	75.6	72.9	69.6
Maximum Hourly Emissions per CT					
SO_2	lb/hr	3.8	3.6	3.4	3.2
PM/PM_{10}	lb/hr	38.8	36.7	35.3	33.4
NO_x	lb/hr	77.1	72.6	69.6	65.9
CO	lb/hr	47.0	44.2	43.0	40.1
VOC (as methane)	lb/hr	20.1	18.9	18.1	17.2
Lead	lb/hr	0.033	0.031	0.029	0.028
Sulfuric Acid Mist	lb/hr	0.74	0.69	0.67	0.63
75 Percent Load					
Temperature (°F)		350	348	346	345
Velocity (ft/sec)		75.9	73.0	70.9	68.2
Maximum Hourly Emissions per CT					
SO_2	lb/hr	3.0	2.8	2.7	2.6
PM/PM_{10}	lb/hr	37.7	36.1	34.9	33.3
NO_x	lb/hr	60.0	57.0	54.9	52.5
CO	lb/hr	228.3	217.0	209.0	200.0
VOC (as methane)	lb/hr	26.1	24.8	23.9	22.8
Lead	lb/hr	0.025	0.024	0.023	0.022
Sulfuric Acid Mist	lb/hr	0.58	0.55	0.53	0.50

[a] Refer to Appendix A for detailed information on basis of pollutant emission rates and operating data.

Sources: MPS, 2008; Golder, 2008.

TABLE 2-2B
STACK, OPERATING, AND EMISSION DATA FOR THE COMBUSTION TURBINES/HRSGS - ULTRA LOW-SULFUR LIGHT OIL COMBUSTION, SIEMENS H CT

		Operating and Emission Data [a] for Ambient Temperature Combustion Turbine/ HRSG			
Parameter		**35 °F**	**59 °F**	**75 °F**	**95 °F**
CT/HRSG Stack Data (feet)					
Height		149	149	149	149
Diameter		22	22	22	22
100 Percent Load					
Temperature (°F)		359	357	355	354
Velocity (ft/sec)		77.8	73.5	70.5	66.6
Maximum Hourly Emissions per CT					
SO_2	lb/hr	3.9	3.7	3.5	3.3
PM/PM_{10}	lb/hr	0.0	0.0	0.0	0.0
NO_x	lb/hr	85.3	80.0	76.2	71.4
CO	lb/hr	65.0	61.0	58.0	54.0
VOC (as methane)	lb/hr	7.4	7.0	6.6	6.2
Lead	lb/hr	0.036	0.034	0.032	0.030
Sulfuric Acid Mist	lb/hr	0.77	0.72	0.69	0.64
75 Percent Load					
Temperature (°F)		350	348	346	345
Velocity (ft/sec)		61.9	59.2	57.2	54.6
Maximum Hourly Emissions per CT					
SO_2	lb/hr	3.2	3.0	2.9	2.7
PM/PM_{10}	lb/hr	30.0	30.0	30.0	30.0
NO_x	lb/hr	69.1	64.8	61.9	58.1
CO	lb/hr	53.0	49.0	47.0	44.0
VOC (as methane)	lb/hr	6.0	5.6	5.4	5.1
Lead	lb/hr	0.029	0.028	0.026	0.025
Sulfuric Acid Mist	lb/hr	0.63	0.59	0.56	0.53

[a] Refer to Appendix A for detailed information on basis of pollutant emission rates and operating data.

Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE 2-3A
SUMMARY OF MAXIMUM POTENTIAL ANNUAL EMISSIONS FOR THE CTS/HRSG, MPS 501G CLASS CT

	Maximum Hourly Emissions (lb/hr) [a]			Maximum Emissions (tons/year)				
	Combined Cycle (CC)			Operating Scenario	Operating Hours			
				CC/ NG 100 % Load	8,760	7,760	5,880	5,030	4,880
Fuel:	NG	NG	Oil	CC/ DB /NG100 % Load	0	1,000	2,880	2,880	2,880
Temp & Load:	59 °F, 100%	59 °F, 100% w/DB	59 °F, 100%	CC/OIL 100 % Load [b]	0	0	0	850	1,000
Pollutant				**TOTAL**	**8,760**	**8,760**	**8,760**	**8,760**	**8,760**
One Combustion Turbine									
SO_2	15.0	17.6	3.6		65.6	66.9	69.5	64.6	63.7
PM/PM_{10}	7.4	11.0	36.7		32.5	34.3	37.7	50.2	52.4
NO_x	19.3	22.8	72.6		84.6	86.3	89.6	112.2	116.2
CO	24.1	52.7	44.2		105.6	119.8	146.7	155.2	156.7
VOC (as methane)	4.1	6.4	18.9		17.9	19.0	21.2	27.5	28.6
Sulfuric Acid Mist	2.9	3.8	0.7		12.8	13.2	14.1	13.1	13.0
HAPs	1.16	1.37	2.87		5.1	5.2	5.4	6.1	6.2
Lead	0.00	0.00	0.031		0.0	0.0	0.0	0.013	0.015
Three Combustion Turbines									
SO_2	44.9	52.9	11		197	201	208	194	191
PM/PM_{10}	22.3	33.1	110		97.6	103.0	113.1	150	157
NO_x	57.9	68.3	218		254	259	269	337	349
CO	72.3	158	133		317	359	440	466	470
VOC (as methane)	12.2	19.1	56.8		53.6	57.1	63.5	82.5	85.8
Sulfuric Acid Mist	8.7	11.5	2.1		38.3	39.7	42.2	39.4	38.9
HAPs	3.48	4.11	8.62		15.26	15.57	16.16	18.3	18.7
Lead	0.00	0.00	0.092		0.000	0.000	0.000	0.039	0.046

[a] Based on 59 °F ambient inlet air temperature .

[b] Based on oil-firing up to: 1,000 hours (maximum).

Sources: MPS, 2008; Golder, 2008.

TABLE 2-3B

SUMMARY OF MAXIMUM POTENTIAL ANNUAL EMISSIONS FOR THE CTS/HRSG, SIEMENS H CTS

	Maximum Hourly Emissions (lb/hr) [a]			Maximum Emissions (TPY)				
	Combined Cycle (CC)			Operating Scenario	Operating Hours			
				CC/ NG 100 % Load	8,760	7,760	5,880	4,880	5,280
Fuel:	NG	NG	Oil	CC/ DB /NG100 % Load	0	1,000	2,880	2,880	2,480
Temp & Load:	59 °F, 100%	59 °F, 100% w/DB	59 °F, 100%	CC/ OIL 100 % Load [b]	0	0	0	1,000	1,000
Pollutant				**TOTAL**	**8,760**	**8,760**	**8,760**	**8,760**	**8,760**
One Combustion Turbine									
SO_2	14.4	17.1	3.7		63.3	64.6	67.1	61.7	61.2
PM/PM_{10}	13.0	16.4	0.0		56.9	58.6	61.8	55.3	54.6
NO_x	19.1	22.6	80.0		83.7	85.5	88.8	119.2	118.5
CO	29.0	48.0	61.0		127.0	136.5	154.4	170.4	166.6
VOC (as methane)	4.8	7.2	7.0		21.2	22.4	24.6	25.7	25.2
Sulfuric Acid Mist	2.8	3.7	0.7		12.3	12.8	13.6	12.6	12.4
HAPs	1.12	1.33	2.99		4.9	5.0	5.2	6.1	6.1
Lead	0.00	0.00	0.034		0.0	0.0	0.0	0.017	0.017
Three Combustion Turbines									
SO_2	43.3	51.3	11		190	194	201	185	184
PM/PM_{10}	39.0	49.2	0		170.8	175.9	185.5	166	164
NO_x	57.4	67.9	240		251	257	266	358	356
CO	87.0	144	183		381	410	463	511	500
VOC (as methane)	14.5	21.7	21.0		63.6	67.2	73.9	77.1	75.7
Sulfuric Acid Mist	8.4	11.2	2.2		36.9	38.3	40.9	37.7	37.2
HAPs	3.36	3.98	8.96		14.70	15.01	15.60	18.4	18.3
Lead	0.00	0.00	0.101		0.000	0.000	0.000	0.050	0.050

[a] Based on 59 °F ambient inlet air temperature .

[b] Based on oil-firing up to 1,000 hours (maximum).

Sources: Siemens, 2008; Golder, 2008.

TABLE 2-4
PERFORMANCE, STACK PARAMETERS, AND EMISSIONS
FOR THE AUXILIARY BOILER

Parameter	Auxiliary Boiler
Performance	
Heat Input (MMBtu/hr-HHV)[a]	99.77
Fuel	Natural gas
Heat Content (HHV-Btu/scf)	1,055
Fuel Usage (scf/hr-boiler)	94,569
Rating (lb steam/hr-boiler)[a]	85,000
Maximum Hours per Year	500
Maximum Fuel Usage (scf/yr)	47,284,360
Exhaust Flow[a]	
Mass Flow (lb/hr)	88,066
Molecular Weight	27.62
Moisture (%)	18.17
Stack Parameters[a]	
Diameter (ft)	2.75
Height (ft)	60
Temperature (°F)	296
Velocity (ft/sec)	82
Flow (acfm)	29,325
Emissions	
SO_2 -Basis (grains S/100 scf-gas) [b]	2
(lb/hr)	0.54
(tpy)	0.14
NO_x - (lb/MMBtu) [a]	0.050
(lb/hr)	4.99
(tpy)	1.25
CO - (lb/MMBtu) [a]	0.080
(lb/hr)	7.98
(tpy)	2.00
VOC - (lb/mmBtu) [c]	0.005
(lb/hr)	0.52
(tpy)	0.13
PM/PM10 - (lb/mmBtu) [c]	0.007
(lb/hr)	0.70
(tpy)	0.17

[a] Nebraska Boiler (2005); Golder Associates, (2005); Values are typical.

[b] Typical maximum sulfur content for natural gas

[c] Emissions based on EPA, 1996 (AP-42, Tables 1.4-1 and 1.4-2).

TABLE 2-5
PERFORMANCE AND EMISSION DATA FOR THE EMERGENCY GENERATORS

Parameter		Emergency Generator
Performance		
Number of Units		2
Rating (kW)		2,250
Rating (hp)		3,200
Fuel		Diesel
Fuel Heat content (Btu/lb) (HHV)		19,300
Fuel density (lb/gal)		7.0
Heat input (MMBtu/hr) (HHV)		21.01
Fuel usage (gallons/hr)		155.5
Maximum operation (hours)		160
Maximum fuel usage (gallons/yr)		24,880
Emissions		
SO_2 -	Basis (%S)	0.0015%
	Conversion of S to SO_2	100
	Molecular weight SO_2/ S (64/32)	2
	Emission rate (lb/hr)	0.03
	(tpy)- one unit	0.003
	(tpy)- total units	0.005
NO_x -	Basis (g/hp-hr)	6.9
	Emission rate (lb/hr)	48.7
	(tpy)- one unit	3.89
	(tpy)- total units	7.79
CO -	Basis (g/hp-hr)	8.5
	Emission rate (lb/hr)	60.0
	(tpy)- one unit	4.80
	(tpy)- total units	9.59
VOC -	Basis (g/hp-hr)	1.0
	Emission rate (lb/hr)	7.1
	(tpy)- one unit	0.56
	(tpy)- total units	1.13
PM/PM_{10} -	Basis (g/hp-hr)	0.4
	Emission rate (lb/hr)	2.8
	(tpy)- one unit	0.23
	(tpy)- total units	0.45

Sources: FPL, Golder; 2008.

TABLE 2-6
PERFORMANCE, STACK PARAMETERS, AND EMISSIONS FOR THE NATURAL GAS FUEL HEATER

	Natural Gas Heater
Performance[a]	
Fuel Usage (scf/hr-gas)	9,479
Heat Input (MMBtu/hr-HHV)	10.00
Hours per Year	8,760
Maximum Fuel Usage (MMscf/yr)	83.03
Number of Units	1
Stack Parameters (typical)	
Diameter (ft)	1
Height (ft)	30
Temperature (°F)	500
Velocity (ft/sec)	53
Flow (acfm)	4,950
Emissions	
SO_2 -Basis (grains S/100 scf-gas)[b]	2
(lb/hr)	0.054
(lb/MMBtu)	0.0054
(tpy) - one unit	0.24
(tpy) - total units	0.24
NO_x - (lb/MMscf)[c]	100
(lb/hr)	0.95
(lb/MMBtu)	0.095
(tpy) - one unit	4.2
(tpy) - total units	4.2
CO - (lb/MMscf)[c]	84
(lb/hr)	0.80
(lb/MMBtu)	0.080
(tpy) - one unit	3.49
(tpy) - total units	3.49
VOC - (lb/MMscf)[c]	5.5
(lb/hr)	0.05
(lb/MMBtu)	0.005
(tpy) - one unit	0.23
(tpy) - total units	0.23
PM/PM10 - (lb/MMscf)[d]	1.9
(lb/hr)	0.02
(lb/MMBtu)	0.002
(tpy) - one unit	0.079
(tpy) - total units	0.079

Note: Project will also have spare heater.

[a] Based on 10 MMBtu/hr (HHV) indirect gas heaters from Hanover Compression Company or equivalent.

[b] Typical maximum for natural gas.

[c] EPA, AP-42 Table 1.4-1 using small boilers < 100 MMBtu.hr and Table 1.4-2.

[d] EPA, AP-42 Table 1.4-2 Filterable PM.

TABLE 2-7
ESTIMATED PERFORMANCE AND EMISSION DATA FOR THE FIRE PUMP ENGINE

Parameter		Fire Pump Engine
Performance		
Number		1
Rating (hp)		300
Fuel		Diesel
Fuel Heat content (Btu/lb) (HHV)		19,300
Fuel density (lb/gal)		7.0
Heat input (MMBtu/hr)[a] (HHV)		2.32
Fuel usage (gallons/hr)		17.2
Maximum operation (hours)		80
Maximum fuel usage (gallons/yr/unit)		1,376
Maximum fuel usage (gallons/yr)		1,376
Stack Parameters		
Number of Stacks		1
Exhaust Flow (cfm)		1,750
Stack Velocity (ft/sec)		60
Exhaust Temperature (°F)		744
Stack Height (ft)		17
Stack Diameter (ft)		0.79
Emissions		
SO_2 -	Basis (%S)	0.0015%
	Conversion of S to SO_2	100
	Molecular weight SO_2/ S (64/32)	2
	Emission rate (lb/hr)	0.0036
	(tpy/diesel engine)	0.00014
	(tpy)	0.00014
NO_x -	Basis (g/hp-hr)[b]	6.8
	Emission rate (lb/hr)	4.50
	(tpy/diesel engine)	0.180
	(tpy)	0.180
CO -	Basis (g/hp-hr)[b]	2.6
	Emission rate (lb/hr)	1.7
	(tpy/diesel engine)	0.069
	(tpy)	0.069
VOC -	Basis (g/hp-hr)[b]	1.0
	Emission rate (lb/hr)	0.66
	(tpy/diesel engine)	0.026
	(tpy)	0.026
PM/PM_{10} -	Basis (g/hp-hr)[b]	0.4
	Emission rate (lb/hr)	0.26
	(tpy/diesel engine)	0.011
	(tpy)	0.011

[a] 2000 gpm fire pump; 300 ft head NFPA 20 Certified; Fairbanks Morse Fire Pumps, 200

[b] Emissions based on 40 CFR Part 60 Subpart IIII.

TABLE 2-8
PERFORMANCE AND EMISSION DATA FOR THE GAS COMPRESSORS

Parameter					
Performance					
Engine Make/Model		Caterpillar/ G3516	Total	Caterpillar/ G3516	Total
Number of Units		1	7	1	7
Engine Configuration		4 Stroke Lean-Burn		4 Stroke Lean-Burn	
Design Rating (hp) - provided		1,340	9,380	1,340	9,380
Fuel		Natural Gas		Natural Gas	
Fuel Heat Content (Btu/scf) (HHV)		1,020		1,020	
Engine Heat Rate (Btu/hp-hr) - provided		7,545		7,545	
Heat input (MMBtu/hr) (HHV)		10.11	70.77	10.11	70.77
Maximum operation (hours)/engine		7,910		8,760	
Maximum Fuel Usage (MMscf/hr)		0.0099	0.0694	0.0099	0.0694
Maximum Fuel Usage (MMscf/yr)		78.40	548.8	86.83	607.8
Stack Parameters					
Height (ft)		40		40	
Diameter (ft)		1.00		1	
Temperature (°F)		854		854	
Flow (acfm)		7,651		7651	
Velocity (ft/sec)		162.4		162.4	
Emissions					
SO_2 -	Basis (grains/100 scf)	2		2	
	Conversion of S to SO_2	100		100	
	Ratio Molecular weight SO_2/ S (64/32)	2		2	
	Emission rate (lb/hr)	0.057	0.40	0.057	0.40
	(tpy)	0.224	1.57	0.248	1.74
NO_x -	Basis (g/hp-hr) [a]	1.5		1.5	
	Emission rate (lb/hr)	4.43	31.02	4.43	31.02
	(tpy)	17.53	122.7	19.41	135.9
CO -	Basis (g/hp-hr)- Uncontrolled [a]	1.90		1.90	
	- Controlled	0.10		0.10	
	Control- oxidation catalyst: efficiency	95%		95%	
	Emission rate (lb/hr)	0.28	1.96	0.28	1.96
	(tpy)	1.11	7.77	1.23	8.60
VOC -	Basis (g/hp-hr)- Uncontrolled [a]	0.31		0.31	
	- Controlled	0.16		0.16	
	Control- oxidation catalyst: efficiency	50%		50%	
	Emission rate (lb/hr)	0.46	3.21	0.46	3.21
	(tpy)	1.81	12.68	2.01	14.04
PM/PM_{10} -	Basis (lb/MMBtu) [b]	0.00999		0.00999	
	Emission rate (lb/hr)	0.101	0.71	0.101	0.71
	(tpy)	0.40	2.80	0.44	3.10

Sources: FPL, 2008; Golder; 2008.

[a] Manufacturer's specification

[b] Based on EPA AP-42, Volume I, August 2000. Table 3.2-2, Uncontrolled Emission Factors for 4-Stroke Lean-Burn Engines.

TABLE 2-9A
SUMMARY OF MAXIMUM POTENTIAL ANNUAL EMISSIONS FOR THE RBEC CONVERSION PROJECT, MPS 501G CLASS CTS

	RBEC Conversion Project Maximum Potential Annual Emissions (TPY)								Netting Calculations		PSD Significant Emission Rate (TPY)
Pollutant	3 CTs/HRSGs with Duct Burners [b]	Auxiliary Boiler [c]	2 Emergency Generators	1 Natural Gas Heater	7 Gas Compressors	Fuel Oil Storage Tank	Fire Pump Engine	TOTAL	Maximum 2-Year Average from Existing Units [a] (TPY)	Change (TPY)	
SO_2	208	0.14	0.005	0.24	1.74	NA	0.00014	210 ✓	10,999 11,140	-10,789 10,930	40
PM	157	0.17	0.45	0.08	3.10	NA	0.011	161 ✓	889 918	-728 757	25
PM_{10}	157	0.17	0.45	0.08	3.10	NA	0.011	161 ✓	889 918	-728 757	15
NO_x	349	1.25	7.79	4.15	135.9	NA	0.18	498 ✓	3,752 7,225	-3,255 7,228	40
CO	470	2.00	9.59	3.49	8.6	NA	0.069	494 ✓	560 703	(-66) 209	100
VOC (as methane)	82.5 [d]	0.13	1.13	0.23	12.7	2.40	0.026	99.1 103.8	59.4 68.4	39.7 35.4	40
Sulfuric Acid Mist	42.2	Neg.	Neg.	Neg.	Neg.	NA	Neg.	42.2 ✓	489.2 495.5	-447 453	7
Lead	0.046	Neg.	Neg.	Neg.	Neg.	NA	Neg.	0.046 ✓	0.12 0.11	-0.071 0.067	0.6

[a] Based on actual emissions from Annual Operating Reports from 2003-2007.

[b] Based on oil-firing for 1,000 hr/yr, except for VOC.

[c] An auxiliary boiler is only required to supply steam to the MPS 501G1 CT during startup.

[d] VOC emissions reflect worst-case of 850 hr/yr of oil-firing and replacing the same number of hours for the compressors.

Note: Neg.= negligible; NA= not applicable

Source: Golder, 2008.

Permit: Cape Canaveral

TABLE 2-9B
SUMMARY OF MAXIMUM POTENTIAL ANNUAL EMISSIONS FOR THE RBEC CONVERSION PROJECT, SIEMENS H CTS

	RBEC Conversion Project Maximum Potential Annual Emissions (TPY)							Netting Calculations		
Pollutant	3 CTs/HRSGs with Duct Burners [b]	2 Emergency Generators	1 Natural Gas Heater	4 Gas Compressors	Fuel Oil Storage Tank	Fire Pump Engine	TOTAL	Maximum 2-Year Average from Existing Units [a] (TPY)	Change (TPY)	PSD Significant Emission Rate (TPY)
SO_2	201	0.005	0.24	0.99	NA	0.00014	203 ✓	10,999 11,140	-10,797 10,937	40
PM	185	0.45	0.08	1.77	NA	0.011	188 189	889 918	-701 729	25
PM_{10}	185	0.45	0.08	1.77	NA	0.011	188 189	889 918	-701 729	15
NO_x	358	7.8	4.15	77.6	NA	0.18	447 506	3,752 7,725	-3,305 7,220	40
CO	511	9.6	3.49	4.9	NA	0.069	529 533	560 703	-30.5 170.3	100
VOC (as methane)	77.1	1.13	0.23	8.0	2.80	0.026	89.3 95	59.4 68.4	30.0 26.6	40
Sulfuric Acid Mist	40.9	Neg.	Neg.	Neg.	NA	Neg.	40.9 ✓	489 405	-448 455	7
Lead	0.050	Neg.	Neg.	Neg.	NA	Neg.	0.050 ✓	0.12 0.11	-0.066 0.062	0.6

[a] Based on actual emissions from Annual Operating Reports from 2003-2007.

[b] Based on oil-firing for: 1,000 hours.

Note: Neg.= negligible; NA= not applicable

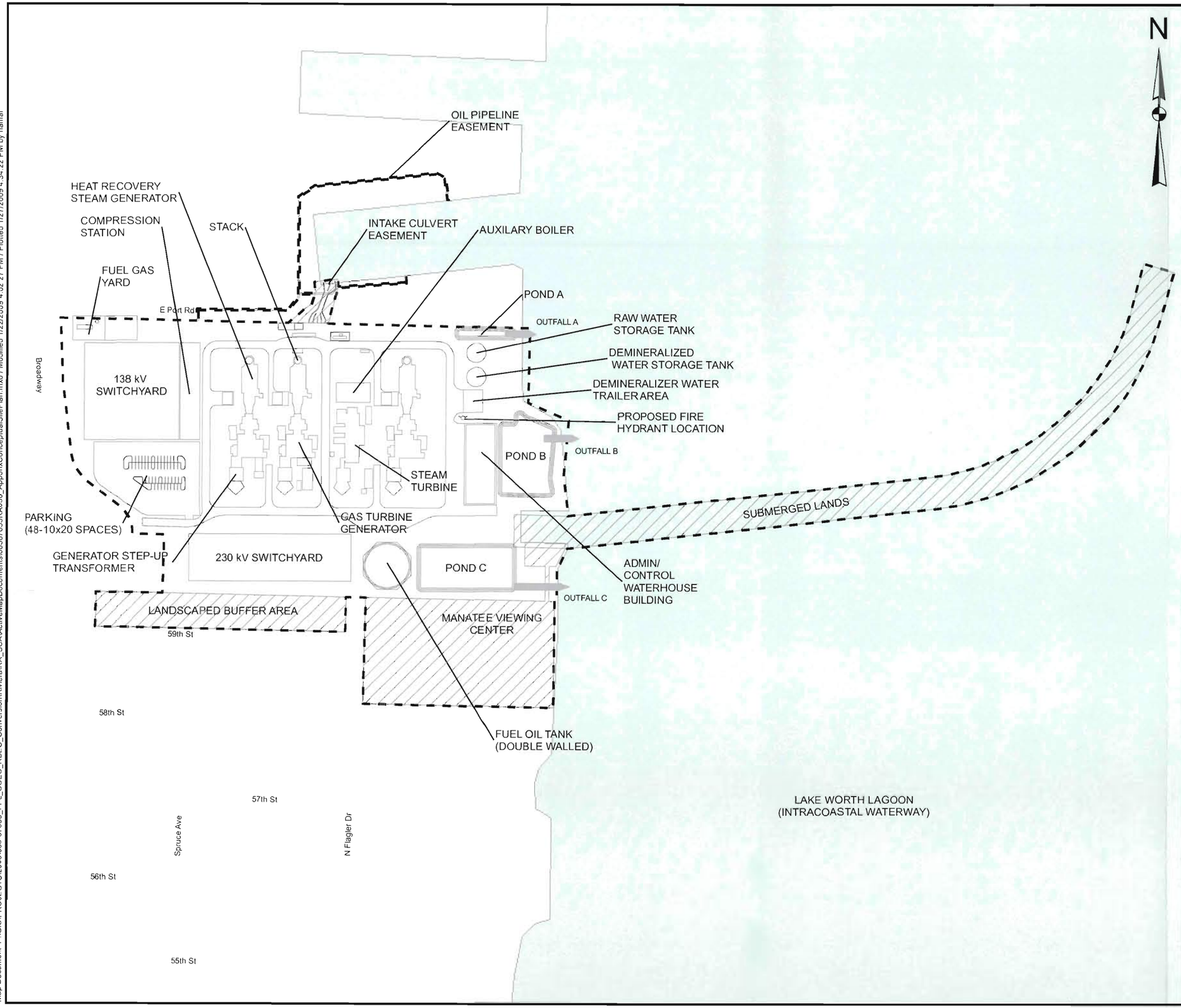
Source: Golder, 2008.

TABLE 2-10
SUMMARY OF MAXIMUM POTENTIAL ANNUAL HAP EMISSIONS FOR RBEC

Pollutant	Maximum Potential Annual Emissions (TPY)								HAP Major Source Threshold (TPY)
	3 CTs/HRSGs with Duct Burners	Auxiliary Boiler	2 Emergency Generators	1 Natural Gas Heater	4 Gas Compressors	Fuel Oil Storage Tank	Fire Pump Engine	TOTAL	
MPS 501G CTs									
Total HAPs	18.70	0.0021	0.005	0.004	0.65 1.13	NA	0.00014	19.36 ✓	25
Single HAP	7.92	0.0018	0.0003	0.003	0.47	NA	0.00001	8.39 8.74	10
Siemens H CTs									
Total HAPs	18.40	NA	0.005	0.004	0.65	NA	0.00014	19.06 19.54	25
Single HAP	7.71	NA	0.000	0.003	0.47	NA	0.00001	8.18 8.53	10

Note: NA= not applicable.

Source: Golder, 2008.



LEGEND

- FPL Riviera Beach Energy Center (To Be Certified)

REFERENCES

1. FPL Riviera Beach Energy Center (to be certified), FPL, 2009.
2. Conceptual Site Plan, FPL drawing srw100002s1.dwg, 2008.
3. Stormwater, Boyle Engineering Corp. Post Development Detention Areas Siting Exhibit, 2008.

250 125 0 250
Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

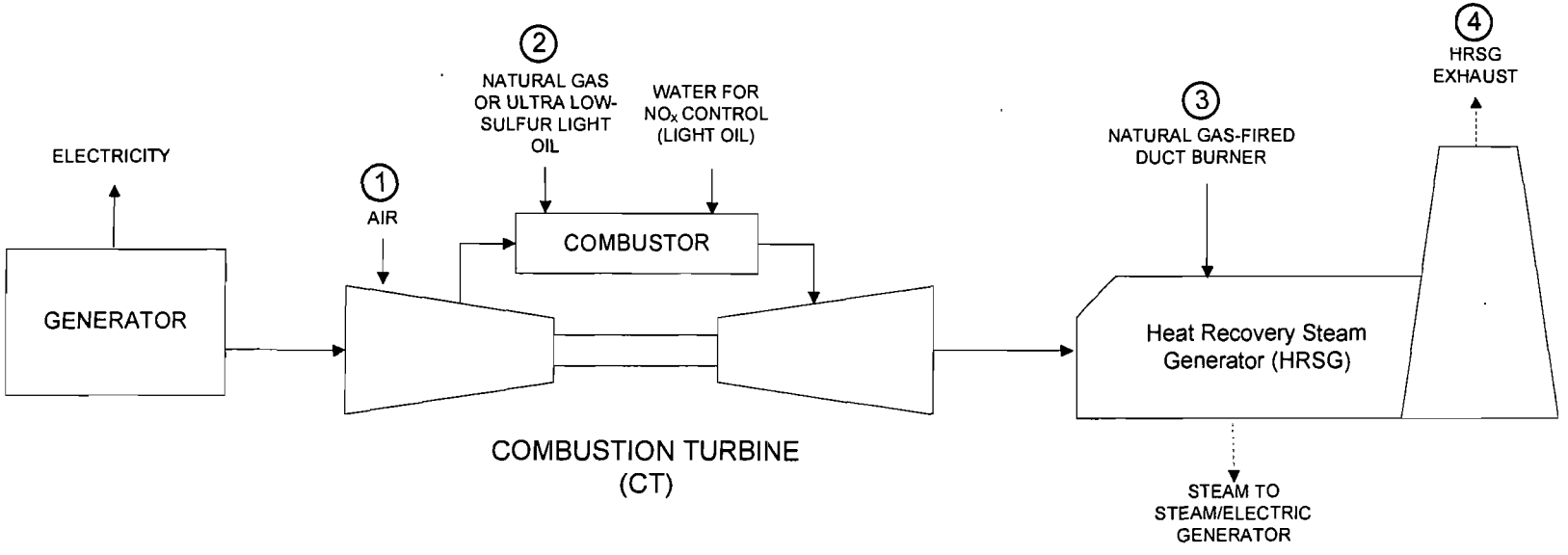
FPL
RIVIERA BEACH ENERGY CENTER

TITLE

CONCEPTUAL SITE PLAN

PROJECT No.		083-87633	FILE No.		08387633RA038
DESIGN	RCM	1/21/2009	SCALE: AS SHOWN		REV 0
GIS	NRL	1/22/2009			
CHECK	RCM	1/22/2009			
REVIEW	KFK	1/27/2009			

FIGURE 2-1



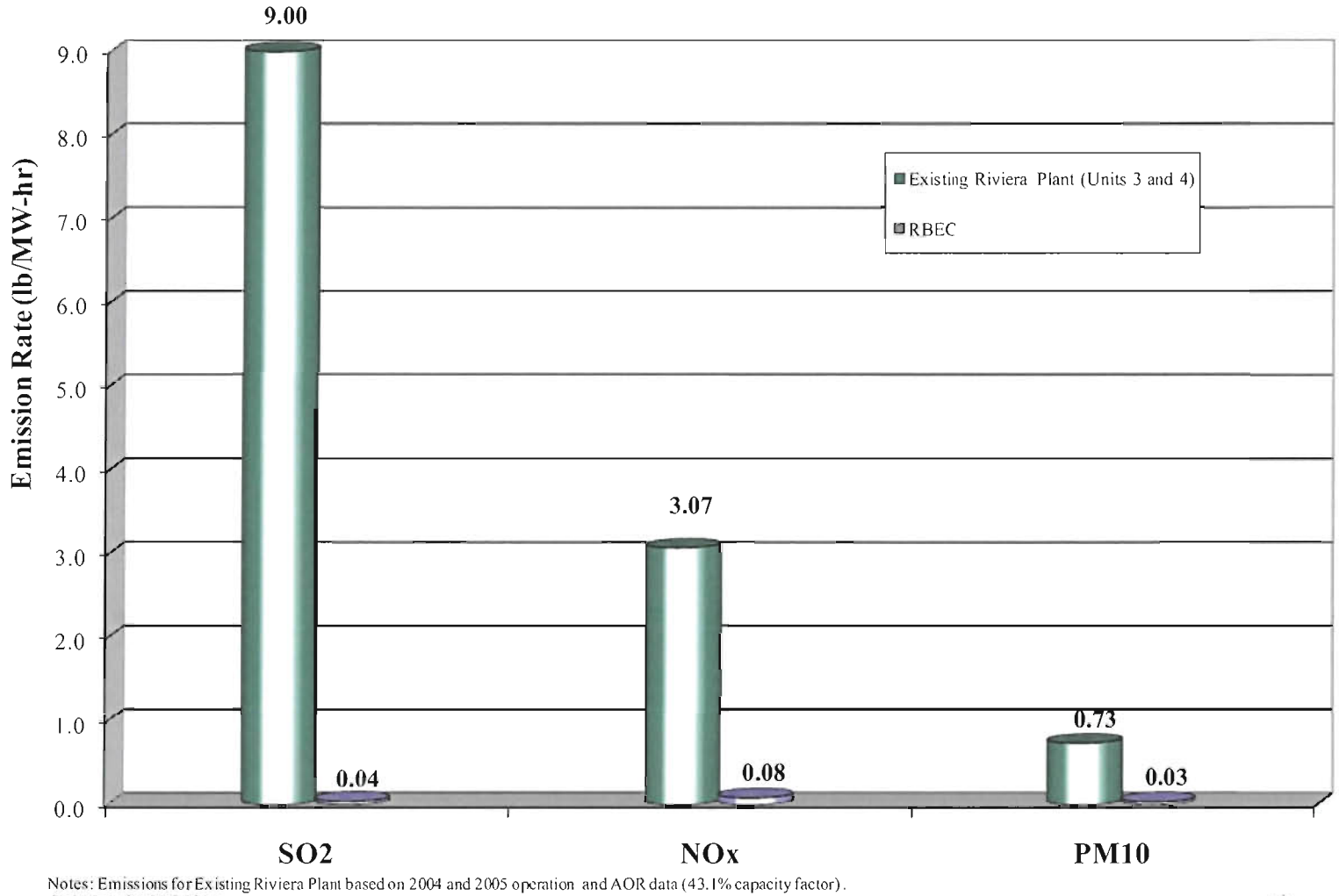
	Parameters	Units	Fuel	MPS 501G Class	Siemens H
1	Inlet Air	lb/hr	Gas	4,928,000	4,769,000
		lb/hr	Oil	4,948,500	4,814,400
2	CT Heat Input	MMBtu/hr (HHV)	Gas	2,671	2,577
		MMBtu/hr (HHV)	Oil	2,318	2,404
3	DB Heat Input	MMBtu/hr (HHV)	Gas (Only)	475	475
4	HRSG Velocity	ft/sec w/o DB	Gas	60.9	59.0
		ft/sec w/o DB	Oil	75.6	74
4	HRSG Temperature	°F	Gas	195	195
		°F	Oil	357	357
4	HRSG Stack Height	feet	Gas/Oil	149	149
4	HRSG Stack Diameter	feet	Gas/Oil	22	22

Figure 2-2. Process Flow Diagram for Each CT/HRSG Train
Baseload Operation, Turbine Inlet Temperature of 59°F
FPL Riviera Beach Energy Center, Palm Beach County, Florida
08387633/Riviera Beach/SCA/Draft/Appendix 10.2.5/Figure 2-2.vsd

Source: MPS, 2008; Golder, 2008.

Process Flow Legend
Solid/Liquid
Gas
Steam

FPL

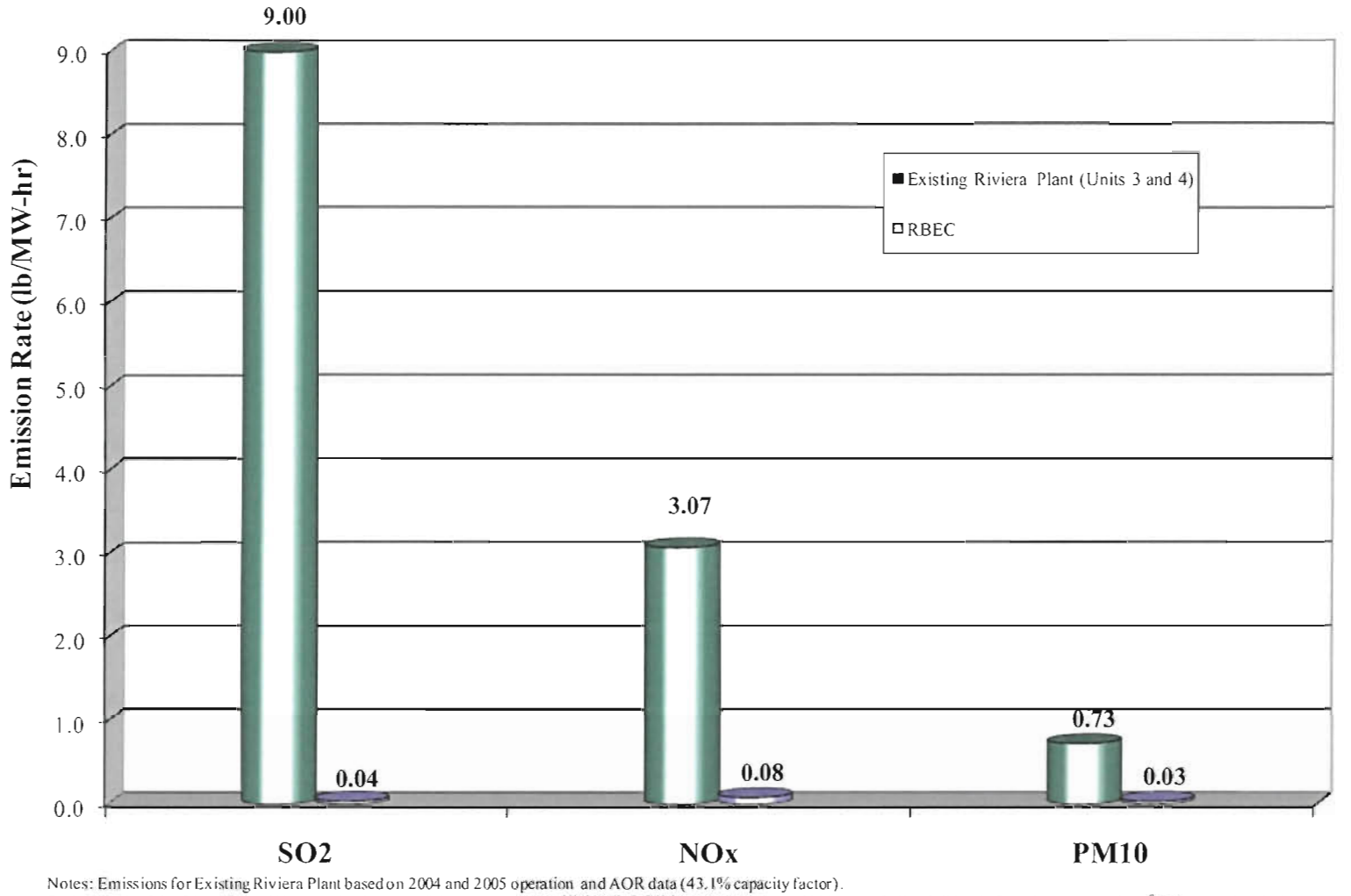


Notes: Emissions for Existing Riviera Plant based on 2004 and 2005 operation and AOR data (43.1% capacity factor).
Emissions for RBEC based on 100% capacity factor on firing natural gas and light oil; 7,760 hours on gas and 1,000 hours of oil at full load. Based on proposed performance and emission limits.
Nominal Capacity: existing = 600 MW; 3-on-1 = 1,250 MW

Figure 2-4
Comparison of Historical Actual SO_2, NO_x, and PM_{10} Emission Rates (lb/MW-hr) for the Existing Riviera Plant Compared to Projected Maximum Potential Emission Rates (lb/MW-hr) for RBEC
Fig 2-4.docx

Source: Golder, 2008.

FPL

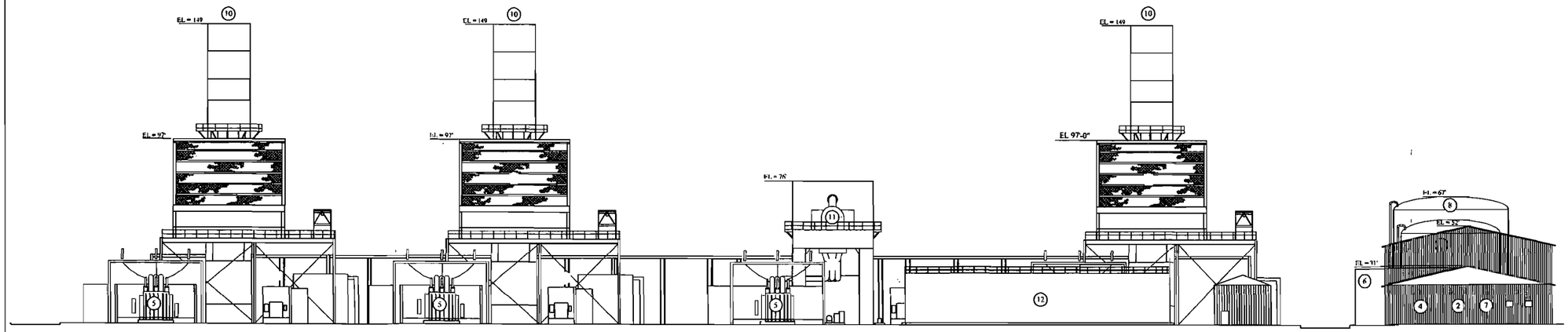


Notes: Emissions for Existing Riviera Plant based on 2004 and 2005 operation and AOR data (43.1% capacity factor).
Emissions for RBEC based on 100% capacity factor on firing natural gas and light oil; 7,760 hours on gas and 1,000 hours of oil at full load. Based on proposed performance and emission limits.
Nominal Capacity: existing = 600 MW; 3-on-1 = 1,250 MW

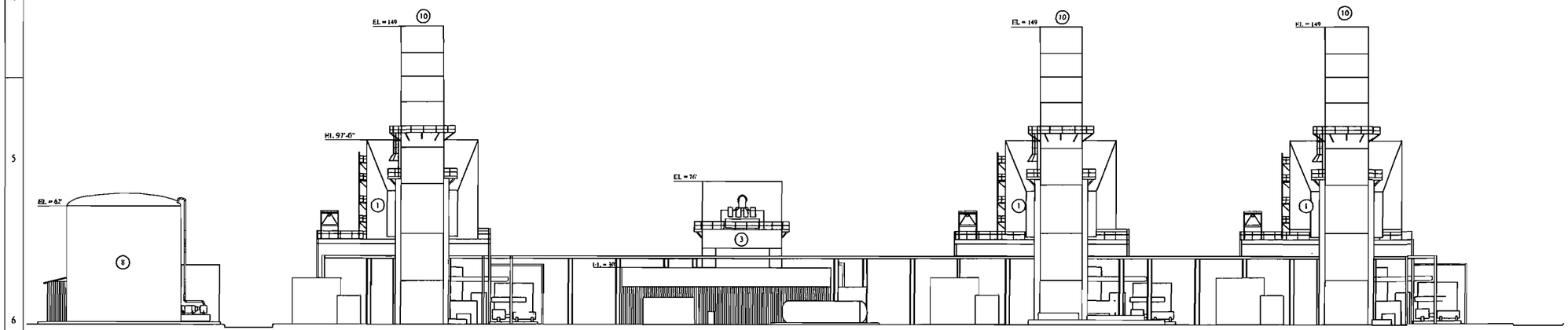
Figure 2-4
Comparison of Historical Actual SO_2, NO_x, and PM_{10} Emission Rates (lb/MW-hr) for the Existing Riviera Plant Compared to Projected Maximum Potential Emission Rates (lb/MW-hr) for RBEC
Fig 2-4.docx

Source: Golder, 2008.

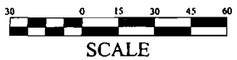
FPL



SOUTH ELEVATION
LOOKING NORTH



NORTH ELEVATION
LOOKING SOUTH



SCALE
SCALE IN FEET

GENERAL NOTES

1. ALL SIZES AND ELEVATIONS ARE APPROXIMATE.
2. ANTICIPATED STACK HEIGHT NOT TO EXCEED 200'; DETERMINED BY ENVIRONMENTAL REGULATIONS.
3. ALL ACREAGES AND LOCATIONS OF STRUCTURES WITHIN THE SITE PLAN ARE APPROXIMATE AND CONCEPTUAL. THE ACREAGES AND LOCATIONS OF STRUCTURES WITHIN THE SITE PLAN MAY BE MODIFIED PURSUANT TO THE POWER PLANT SITING ACT, SECTION 403.501, FLORIDA STATUTES.
4. BUILDING PERMITS:
   ELECTRICAL POWER GENERATING FACILITIES ARE EXEMPT PER SECTION 403.510 AND 403.511, FLORIDA STATUTES AND SECTION 102.2(F), 2004 FLORIDA BUILDING CODE.

LEGEND

1. HEAT RECOVERY STEAM GENERATOR
2. ADMINISTRATION BUILDING
3. STEAM TURBINE
4. WAREHOUSE BUILDING
5. GENERATOR STEP-UP TRANSFORMER
6. DEMINERALIZER WATER TRAILER AREA
7. CONTROL ROOM
8. RAW WATER STORAGE TANK
9. DEMINERALIZED WATER STORAGE TANK
10. STACK
11. STEAM TURBINE GENERATOR
12. FUEL OIL TANK (DOUBLE WALLED)

REFERENCE DRAWINGS

1. SITE RELATED WORK - 3x1 COMBINED CYCLE - 501G GENERAL ARRANGEMENT - PLAN D013455-SRWL00001 SH01
2. SITE RELATED WORK - 3x1 COMBINED CYCLE - 501G EAST/WEST ELEVATION D013455-SRWL00003 SH01

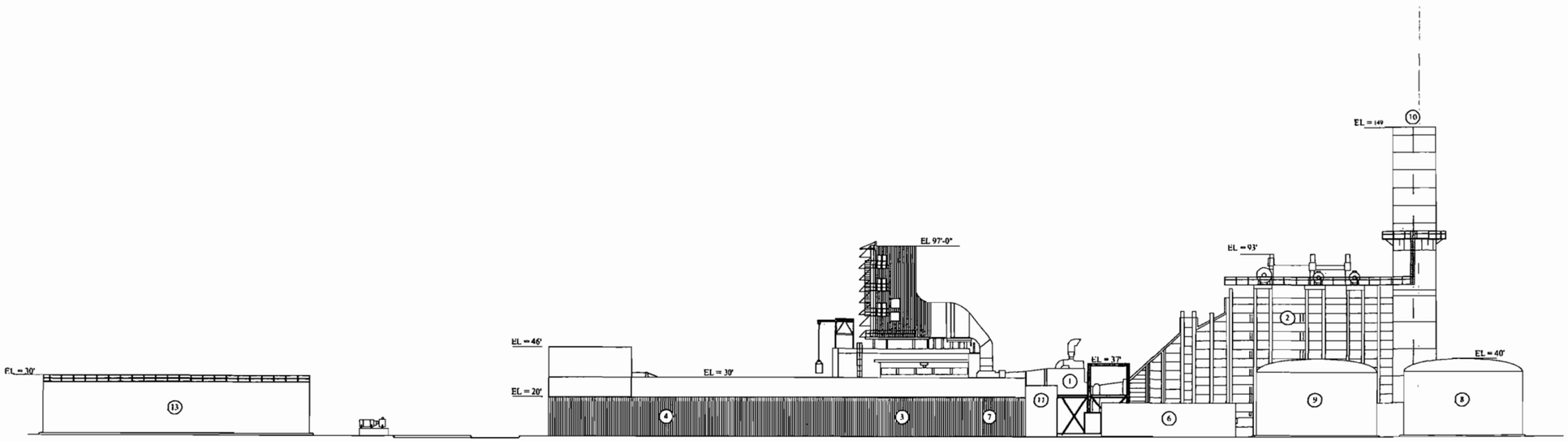
PRELIMINARY
NOT FOR CONSTRUCTION

REV	ISSUE FOR COMMENT / REVISIONS	DATE	DSNR	CHK	APVR	APPR
A						

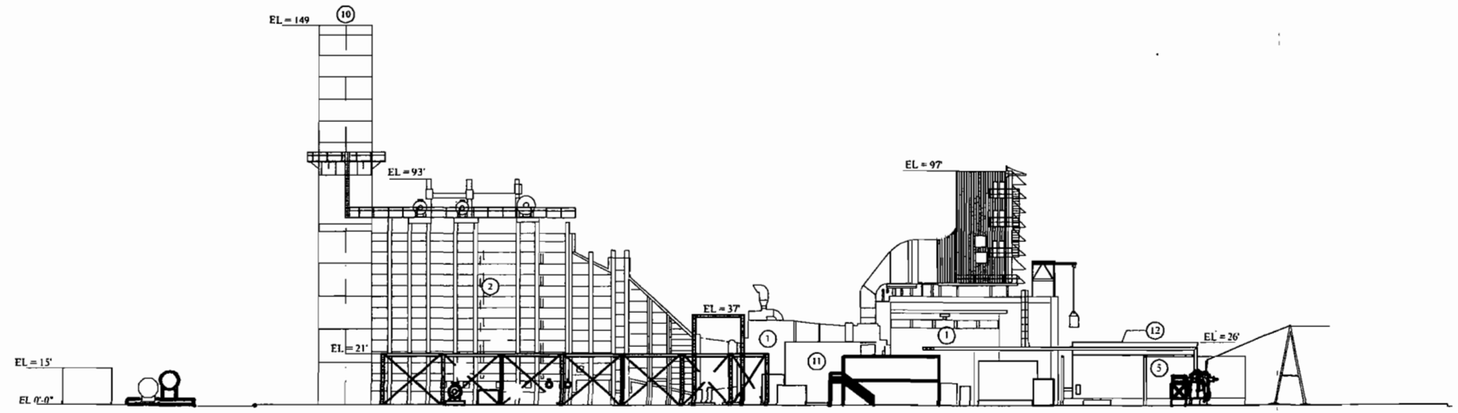
FPL

FIGURE 2-5
NORTH-SOUTH PROFILE OF COMBUSTION TURBINES AND HRSGS
RIVIERA BEACH ENERGY CENTER

DRAWN	DATE	CHECKED	CHECKED	
APPROVED		CONFIGURATION ITEM #	D013455-SRWL00004	01 A
APPROVED				



EAST ELEVATION
LOOKING WEST



WEST ELEVATION
LOOKING EAST

30 0 15 30 45 60
SCALE
SCALE IN FEET

LEGEND

1. GAS TURBINE AND GENERATOR
2. HEAT RECOVERY STEAM GENERATOR
3. ADMINISTRATION BUILDING
4. WAREHOUSE BUILDING
5. GENERATOR STEP-UP TRANSFORMER
6. DEMINERALIZER WATER TRAILER AREA
7. CONTROL ROOM
8. RAW WATER STORAGE TANK
9. DEMINERALIZED WATER STORAGE TANK
10. STACK
11. CT TURBINE ENCLOSURE
12. COMBUSTION TURBINE SFC
13. FUEL OIL TANK (DOUBLE WALLED)

GENERAL NOTES

1. ALL SIZES AND ELEVATIONS ARE APPROXIMATE.
2. ANTICIPATED STACK HEIGHT NOT TO EXCEED 200', DETERMINED BY ENVIRONMENTAL REGULATIONS.
3. ALL ACREAGES AND LOCATIONS OF STRUCTURES WITHIN THE SITE PLAN ARE APPROXIMATE AND CONCEPTUAL. THE ACREAGES AND LOCATIONS OF STRUCTURES WITHIN THE SITE PLAN MAY BE MODIFIED PURSUANT TO THE POWER PLANT SITING ACT, SECTION 403.501, FLORIDA STATUTES.
4. BUILDING PERMITS:
   ELECTRICAL POWER GENERATING FACILITIES ARE EXEMPT PER SECTION 403.519 AND 403.511, FLORIDA STATUTES AND SECTION 102.2(F), 2004 FLORIDA BUILDING CODE.

REFERENCE DRAWINGS

1. SITE RELATED WORK - 3x1 COMBINED CYCLE - 501G GENERAL ARRANGEMENT - PLAN D013455-SRW100001 SH01
2. SITE RELATED WORK - 3x1 COMBINED CYCLE - 501G NORTH SOUTH ELEVATION D013455-SRWL00004 SH01

PRELIMINARY
NOT FOR CONSTRUCTION

NO.	REVISIONS	DATE	DRAWN	CHK.	PROJ.	APPR.
A	INITIAL SUBMITTAL					

FPL

FIGURE 2-6
EAST-WEST PROFILE OF COMBUSTION TURBINES AND HRSGS
RIVIERA BEACH ENERGY CENTER

PROJECT	040005	ORIGINATOR		CHECKED		ENGINEER	
C. JENSEN							
APPROVED		CUSTOMER APPROVAL				SHEET	REV
						D013455-SRWL00003	01 A

3.0 AIR QUALITY REVIEW REQUIREMENTS AND APPLICABILITY

The following discussion pertains to federal, State, and local air regulatory requirements and their applicability to RBEC.

3.1 National, State, and Local AAQS

The existing applicable national and State of Florida local AAQS are presented in Table 3-1. Primary national AAQS were promulgated to protect the public health with an adequate margin of safety and secondary national AAQS were promulgated to protect the public welfare from any known or anticipated adverse effects associated with the presence of pollutants in the ambient air. Areas of the country in compliance with AAQS are designated as attainment areas. New sources to be located or modified sources located in or near these areas may be subject to more stringent air permitting requirements.

3.2 PSD Requirements

3.2.1 General Requirements

Under federally approved State of Florida PSD review requirements, all major new or modified sources of air pollutants regulated under the Clean Air Act (CAA) must be reviewed and a pre-construction permit issued.

PSD is applicable to a "major facility" and certain "modifications" that occur at a major facility. A major facility is defined as any 1 of 28 named source categories that have the potential to emit 100 TPY or more or any other stationary facility that has the potential to emit 250 TPY or more of any pollutant regulated under CAA. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant after the application of control equipment. Net emission increases from a modification at a major facility that exceed the PSD significant emission rates are also subject to PSD review.

EPA has promulgated regulations providing that certain increases above an air quality baseline concentration level of SO_2, PM_{10}, and nitrogen dioxide (NO_2) concentrations that would constitute significant deterioration. The EPA class designations and allowable PSD increments are presented in Table 3-1. The State of Florida has adopted the EPA class designations and allowable PSD increments for SO_2, PM_{10}, and NO_2.

PSD review is used to determine whether significant air quality deterioration will result from the new or modified facility. The State of Florida's PSD regulations are found in Rule 62-212.400, F.A.C. Major new facilities and major modifications are required to undergo the following analysis related to PSD for each pollutant emitted in significant amounts (see Table 3-2):

1. Control technology review;
2. Source impact analysis;
3. Air quality analysis (monitoring);
4. Source information; and
5. Additional impact analyses.

In addition to these analyses, a new major facility or major modification made to an existing major facility also must be reviewed with respect to Good Engineering Practice (GEP) stack height regulations. Discussions concerning each of these requirements for a new major facility or major modification are presented in the following sections. It is important to note that the emission reductions available from the retirement of the existing Plant allow the converted Plant to be a minor modification, exempt from PSD review (see Sections 2.4 and 3.5).

3.2.2 Control Technology Review

A new major facility or major modification must perform a control technology review, which requires that all applicable federal and State emission-limiting standards be met and that BACT be applied to control emissions from the source (Rule 62-212.400, F.A.C.). The BACT requirements are applicable to all regulated pollutants for which the increase in emissions from the facility or modification exceeds the significant emission rate (see Table 3-2).

BACT is defined in Rule 62-210.200(40), F.A.C., as:

> *(a) An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted, which the Department, on a case-by-case basis, determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant taking into account:*
>
> *1. Energy, environmental and economic impacts, and other costs;*
>
> *2. All scientific, engineering, and technical material and other information available to the Department; and*

3. *The emission limiting standards or BACT determinations of Florida and any other State.*

(b) *If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.*

(c) *Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results.*

(d) *In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63.*

The BACT requirements are intended to ensure that the control systems incorporated in the design of a proposed facility reflect the latest in control technologies used in a particular industry and take into consideration existing and future air quality in the vicinity of the proposed facility. BACT must, as a minimum, demonstrate compliance with new source performance standards (NSPS) for a source (if applicable). An evaluation of the air pollution control techniques and systems, including a cost-benefit analysis of alternative control technologies capable of achieving a higher degree of emission reduction than the proposed control technology, is required. The cost-benefit analysis requires the documentation of the materials, energy, and economic penalties associated with the proposed and alternative control systems, as well as the environmental benefits derived from these systems. A decision on BACT is to be based on sound judgment, balancing environmental benefits with energy, economic, and other impacts (EPA, 1978).

3.2.3 Source Impact Analysis

A source impact analysis must be performed for a new major facility or major modification to a major source for each pollutant, subject to PSD review, for which net emissions exceed the significant emission rate (Table 3-2). The PSD regulations specifically provide for the use of atmospheric dispersion models in performing impact analyses, estimating baseline and future air quality levels, and determining compliance with AAQS and allowable PSD increments. Designated EPA models that are approved by FDEP normally must be used in performing the impact analysis. Specific applications for other than EPA-approved models require EPA's consultation and prior approval. Guidance for the use and application of dispersion models is presented in the EPA publication *Guideline on Air Quality Models (Revised)*. The source impact analysis for criteria pollutants to

address compliance with AAQS and PSD Class II increments may be limited to the new source if the impacts as a result of the new source are below significance impact levels, as presented in Table 3-1.

The EPA has proposed significant impact levels for Class I area. Although these levels have not been officially promulgated as part of the federal PSD regulations and may not be binding for States in performing PSD reviews, the levels serve as a guideline in assessing a source's impact in a Class I area. FDEP has accepted the use of these significant impact levels.

Various lengths of meteorological data records can be used for impact analysis. A 5-year period can be used with corresponding evaluation of highest, second-highest short-term concentrations for comparison to AAQS or PSD increments. The term "highest, second-highest" (HSH) refers to the highest of the second-highest concentrations at all receptors (i.e., the highest concentration at each receptor is discarded). The second-highest concentration is significant because short-term AAQS specify that the standard should not be exceeded at any location more than once a year. If fewer than 5 years of meteorological data are used in the modeling analysis, the highest concentration at each receptor normally must be used for comparison to air quality standards.

3.2.4 Air Quality Monitoring Requirements

In accordance with requirements of Rule 62-212.400(5)(f), F.A.C., PSD review for a new major facility or major modification must consider an analysis of continuous ambient air quality data in the area affected by the proposed major PSD source or major modification. For a new major facility or major modification, the affected pollutants are those that the facility potentially would emit above the significant emission rates.

Ambient air monitoring for a period of up to 1 year generally is appropriate to satisfy the PSD monitoring requirements. Data for a minimum of 4 months are required. Existing data from the vicinity of the proposed source may be used, if the data meet certain quality assurance requirements; otherwise, additional data may need to be gathered. Guidance in designing a PSD monitoring network is provided in *Ambient Monitoring Guidelines for Prevention of Significant Deterioration* (EPA, 1987a).

The regulations include an exemption that excludes or limits the pollutants for which an air quality analysis must be conducted. This exemption states that a proposed major stationary facility is exempt from the monitoring requirements with respect to a particular pollutant, if the emissions of the pollutant from the facility would cause, in any area, air quality impacts less than the *de minimis* levels

presented in Table 3-2 (Rule 62-212.400-3, F.A.C.). If a facility's predicted impacts are less than the *de minimis* levels, then preconstruction monitoring is not required.

3.2.5 Source Information/GEP Stack Height

Source information must be provided to adequately describe the proposed facility or major modification subject to PSD review.

The 1977 CAA Amendments require that the degree of emission limitation required for control of any pollutant cannot be affected by a stack height that exceeds GEP or any other dispersion technique. On July 8, 1985, EPA promulgated final stack height regulations (EPA, 1985a). Identical regulations have been adopted by FDEP (Rule 62-210.550, F.A.C.). GEP stack height is defined as the highest of:

1. 65 meters (m); or
2. A height established by applying the formula:

$$Hg = H + 1.5\,L$$

where:

Hg = GEP stack height,

H = Height of the structure or nearby structure, and

L = Lesser dimension (height or projected width) of nearby structure(s); or

3. A height demonstrated by a fluid model or field study.

"Nearby" is defined as a distance up to 5 times the lesser of the height or width dimensions of a structure or terrain feature, but not greater than 0.8 kilometers (km). Although GEP stack height regulations require that the stack height used in modeling for determining compliance with AAQS and PSD increments not exceed the GEP stack height, the actual stack height may be greater.

The stack height regulations also allow increased GEP stack height beyond that resulting from the above formula in cases where plume impaction occurs. Plume impaction is defined as concentrations measured or predicted to occur when the plume interacts with elevated terrain. Elevated terrain is defined as terrain that exceeds the height calculated by the GEP stack height formula.

3.2.6 Additional Impact Analysis

In addition to air quality impact analyses, State of Florida PSD regulations require analyses for applicable pollutants of the impairment to visibility and the impacts on soils and vegetation that

would occur as a result of a new major facility or major modification subject to PSD review [Rule 62-212.400(5)(e), F.A.C.]. Impacts as a result of general commercial, residential, industrial, and other growth associated with the source also must be addressed. These analyses are required for each pollutant emitted in significant amounts (see Table 3-2).

3.2.7 Air Quality Related Values

An Air Quality Related Value (AQRV) analysis is required for projects for those pollutants undergoing PSD review to assess the potential impact on AQRVs in PSD Class I areas. The nearest Class I areas to the Site are the Everglades National Park (NP), located about 120 km (72 miles) from the Site, and the Chassahowitzka National Wilderness Area (NWA), located about 326 km (196 miles) from the Site. The U.S. Department of the Interior in 1978 administratively defined AQRVs to be:

> *All those values possessed by an area except those that are not affected by changes in air quality and include all those assets of an area whose vitality, significance, or integrity is dependent in some way upon the air environment. These values include visibility and those scenic, cultural, biological, and recreational resources of an area that are affected by air quality.*
>
> *Important attributes of an area are those values or assets that make an area significant as a national monument, preserve, or primitive area. They are the assets that are to be preserved if the area is to achieve the purposes for which it was set aside (Federal Register, 1978).*

The AQRVs include visibility, freshwater and coastal wetlands, dominant plant communities, unique and rare plant communities, soils and associated periphyton, and the wildlife dependent on these communities for habitat. Rare, endemic, threatened, and endangered species of the NP and bioindicators of air pollution (e.g., lichens) must also be evaluated.

3.3 Nonattainment Rules

FDEP has nonattainment provisions (Rule 62-212.500, F.A.C.) that apply to all new major facilities or major modifications to major facilities located in a nonattainment area. In addition, for these facilities that are located in an attainment or unclassifiable area, the nonattainment review procedures apply if the source or modification is located within the area of influence of a nonattainment area. RBEC is located in Palm Beach County, which is classified as an attainment area for all criteria pollutants. Therefore, nonattainment New Source Review (NSR) requirements are not applicable.

3.4 Emission Standards

3.4.1 New Source Performance Standards

The NSPS are a set of national emission standards that apply to specific categories of new sources. As stated in the 1977 CAA Amendments, these standards "shall reflect the degree of emission limitation and the percentage reduction achievable through application of the best technological system of continuous emission reduction the Administrator determines has been adequately demonstrated."

RBEC will be subject to one or more NSPS. EPA recently promulgated new NSPS for Stationary Combustion Turbines that will commence construction after February 18, 2005. These NSPS, Subpart KKKK, will replace Subpart GG and Da for combustion turbines and duct burners, respectively, in combined cycle mode.

On October 15, 2003, EPA promulgated changes to 40 CFR Part 60, Subpart Kb that would exempt light oil tanks containing No. 2 light oil by virtue of its vapor pressure (FR Vol. 68, No. 199, Pages 59328-59333).

Combustion Turbine

NO_x and SO_2 emissions from all stationary CTs with a heat input at peak load equal to 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuel fired are limited per 40 CFR 60 Subpart KKKK. NO_x emissions for these proposed CTs (i.e., >850 MMBtu/hr) are limited by Subpart KKKK to 15 ppmvd corrected to 15-percent O_2 and 42 ppmvd corrected to 15-percent O_2 for gas and oil-firing, respectively. SO_2 emissions are limited to using a fuel with a sulfur content of no greater than 0.05 percent and 20 grains of sulfur per 100 standard cubic feet for oil and gas-firing, respectively. In addition to emission limitations, there are requirements for performance testing and monitoring in 40 CFR Subpart KKKK. There are also applicable notification, reporting, and recordkeeping requirements in the general provisions of 40 CFR Subpart A. These are summarized below:

40 CFR 60.7 Notification and Record Keeping

- *(a)(1) Notification of the date of construction - 30 days after such date.*
- *(a)(3) Notification of actual date of initial startup - within 15 days after such date.*
- *(a)(5) Notification of date which demonstrates CEM - not less than 30 days prior to date.*

60.7 (b) Maintain records of all startups, shutdowns, and malfunctions.

(c) Excess emissions reports – semi-annually by the 30th day following 6-month period (required even if no excess emissions occur).

(d) Maintain file of all measurements for 2 years.

60.8 Performance Tests

(a) Must be performed within 60 days after achieving maximum production rate, but no later than 180 days after initial startup.

(d) Notification of Performance tests at least 30 days prior to them occurring.

Duct Burner

As stated previously, the Subpart KKKK requirements have replaced the Subpart Da requirements for duct burners associated with a combined cycle project. NO_x emissions are limited to 54 parts per million (ppm) at 15 percent O_2 or 0.86 lb/MW for gas-firing.

Other Emission Units

NSPS are also applicable to the auxiliary boiler, fuel heaters, gas compressors, fire pump engine, and emergency generators. The EPA NSPS Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applies to the auxiliary boiler and fuel heaters. For the emergency generators, gas compressors and fire pump engine, NSPS Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, is applicable.

3.4.2 National Emission Standards for Hazardous Air Pollutants

EPA has promulgated maximum achievable control technology (MACT) standards under the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) regulations. Maximum annual potential hazardous air pollutants (HAPs) emissions were presented earlier in Table 2-10 for the MPS 501G and Siemens H CTs. Additional detail on the HAP emission calculations is also presented in Appendix A. RBEC will not be a major source of HAP emissions, since maximum potential emissions are not projected to exceed 10 tons per year (TPY) of a single HAP, nor exceed 25 TPY for all HAPs. Therefore, with one exception, because RBEC is a minor source of HAPs, none of the MACT standards under the NESHAP regulations would apply. The exception would be 40 CFR 63, Subpart ZZZZ addressing reciprocating internal combustion engines (RICE). Under this rule, if the facility is not a major source of HAPs, it would still be categorized as an area source and be subject to the rule. However, the method of compliance under this provision would be to demonstrate

compliance with 40 CFR 60, Subpart IIII, which was previously cited in Subsection 3.4.2 under Other Emission Units.

3.4.3 Florida Rules

FDEP has adopted the EPA NSPS by reference in Rule 62-204.800(7): Subsection (b)39 for stationary gas turbines, Substation (6)(2) for the duct burners, and Subsection (b)16 for volatile organic liquid storage vessels. Therefore, the facility is required to meet the same emissions, performance testing, monitoring, reporting, and record keeping as those described in Section 3.4.1. FDEP has authority for implementing NSPS requirements in Florida.

3.4.4 Florida Air Permitting Requirements

The FDEP regulations require any new source to obtain an air permit prior to construction. Major new sources must meet the appropriate PSD and nonattainment requirements as discussed previously. Required permits and approvals for air pollution sources include NSR for nonattainment areas, PSD, NSPS, NESHAP, Permit to Construct, and Permit to Operate. The requirements for construction permits and approvals are contained in Rules 62-4.030, 62-4.050, 62-4.210, 62-210.300(1), and 62-212.400, F.A.C. Specific emission standards are set forth in Chapter 62-296, F.A.C.

This Application is being filed for the purpose of establishing federally-enforceable emission limitations that insure the Project will not result in a significant net increase in emissions of any regulated air pollutant, in accordance with FDEP's federally-approved minor source air construction permit program under Florida's federally-required State Implementation Plan

3.4.5 Local Air Regulations

Palm Beach County Health Department (PBCHD) is the air compliance authority for the County, implementing FDEP regulations. Since 1994, the PBCHD's Air Pollution Control Section has been delegated authority to review, process, and take appropriate action (i.e., exempt, issue, or deny) on most FDEP District-Level permits within the County. The PBCHD has been delegated authority for FDEP District-Level Permits through the Air Specific Operating Agreement (SOA) for most air pollution sources within Palm Beach County. However, permits for electrical power plants are issued by FDEP and not the PBCHD.

3.5 Source Applicability

3.5.1 Area Classification

RBEC is located in Palm Beach County, which has been designated by EPA and FDEP as an attainment area (includes unclassifiable) for all criteria pollutants. Palm Beach County and surrounding counties are designated as PSD Class II areas for SO_2, PM [total suspended particulate (TSP)], and NO_2. The nearest Class I area to the Site is the Everglades National Park (NP), located about 120 km (72 miles) from the Site, and Chassahowitzka National Wilderness Area (NWA), located about 326 km (196 miles) from the Site.

3.5.2 PSD Review

Pollutant Applicability

The emission reductions available from the retirement of the existing Units 3 and 4 classify RBEC as a minor modification of a major source. PSD review is not applicable since the net emissions do not exceed the PSD significant emission rates (see Tables 2-9A and 2-9B in Section 2.0 and Table 3-3). Since the existing units will be permanently retired, FPL will use emissions reductions from Units 3 and 4 to net out of PSD review for all PSD pollutants for the converted Plant. FPL proposes to implement a plant-wide VOC emission cap with the MPS 501G CTs and to track and report annual VOC emissions from RBEC in accordance with 40 CFR 52.21(b)(33), which is adopted and incorporated by reference in Rule 62-204.800, F.A.C. (Note: EPA no longer requires PSD review for HAPs from PSD review. The pollutants vinyl chloride, asbestos, and beryllium are no longer evaluated in PSD review because they are addressed through the NESHAP program).

Emission Standards

NO_x and SO_2 emissions from all stationary CTs with a heat input at peak load equal to 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuel fired are limited per 40 CFR 60 Subpart KKKK. NO_x emissions for these proposed CTs (i.e., >850 MMBtu/hr) are limited by Subpart KKKK to 15 ppmvd corrected to 15-percent O_2 and 42 ppmvd corrected to 15-percent O_2 for gas and oil-firing, respectively. SO_2 emissions are limited to using a fuel with a sulfur content of no greater than 0.05 percent and 20 grains of sulfur per 100 standard cubic feet for oil and gas-firing, respectively. These requirements are summarized in Section 4.2. In addition to emission limitations, there are requirements for performance testing and monitoring in 40 CFR Subpart KKKK. There are also applicable notification, reporting, and recordkeeping requirements in the general provisions of 40 CFR Subpart A. The proposed emissions for RBEC will be well below the specified limits (see Section 4.0).

NSPS are also applicable to the auxiliary boiler, fuel heater, gas compressors, fire pump engine, and emergency generators. The EPA NSPS Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applies to the auxiliary boiler and fuel heaters. For the emergency generators, gas compressors and fire pump engine, NSPS Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, is applicable.

RBEC will not be a major source of HAP emissions, since maximum potential emissions are not projected to exceed 10 TPY of a single HAP, nor exceed 25 TPY for all HAPs. Therefore, because RBEC is a minor source of HAPs, none of the MACT standards under the NESHAP regulations would apply. Although the NESHAPs Subpart YYYY does not apply to the converted Plant, information available from the equipment vendors indicate that RBEC will meet the proposed MACT of 91 parts per billion volume dry (ppbvd) corrected to 15-percent O_2 for formaldehyde.

Ambient Monitoring

For the converted Plant, the net emissions changes will be less than the PSD significant emission rates. As a result, an air quality monitoring impact analysis is not required by NSR under FDEP air regulations. As a supplement to the air permit application, air quality monitoring data are provided, which demonstrate that Palm Beach County is in attainment of the AAQS for all criteria pollutants. These data are presented in Section 5.0 of this application.

GEP Stack Height Impact Analysis

The GEP stack height regulations allow any stack to be at least 65 m (213 feet) high. The HRSG stacks will be 149 feet. These stack heights do not exceed the GEP stack height. However, as discussed in Section 6.0, Air Quality Modeling Approach, since the stack height is less than GEP, building downwash effects must be considered in the modeling analysis. As a result, the potential for downwash of the CT and duct burner emissions caused by nearby structures is included in the modeling analysis.

3.5.3 Local Air Regulations

As specified in Subsection 3.4.5, PBCHD does not have delegated authority to review, process, or take appropriate action over electrical power plant projects; therefore, permitting requirements for RBEC will comply with FDEP permitting requirements. RBEC will obtain a minor source air construction permit for which this application is applicable.

3.5.4 Other Clean Air Act Requirements

The 1990 CAA Amendments established a program to reduce potential precursors of acidic deposition. The Acid Rain Program was delineated in Title IV of the CAA Amendments and required EPA to develop the program. EPA's final regulations were promulgated on January 11, 1993, and included permit provisions (40 CFR 72), allowance system (Part 73), continuous emission monitoring (Part 75), excess emission procedures (Part 77), and appeal procedures (Part 78).

EPA's Acid Rain Program applies to all existing and new utility units, except those serving a generator less than 25 MW, existing simple cycle CTs, and certain non-utility facilities; units which fall under the program are referred to as affected units. The EPA regulations are applicable to RBEC for the purposes for obtaining a permit and allowances, as well as emission monitoring. New units are required to obtain permits under the program by submitting a complete application 24 months before the date on which the unit commences operation (e.g., first fire).

The permit would require the units to hold SO_2 emission allowances. Emission limitations established in the Acid Rain Program are presumed to be less stringent than BACT for new units. An allowance is a market-based financial instrument that is equivalent to 1 ton of SO_2 emissions. Allowances can be sold, purchased, or traded.

Continuous emission monitoring (CEM) for NO_x is required for gas fired and oil fired affected units. SO_2 monitoring is also required, although use of a CEM is optional. When an SO_2 CEM is selected to monitor SO_2 mass emissions, a flow monitor is also required. Alternately, SO_2 emissions may be determined using procedures established in Appendix D, 40 CFR Part 75 (flow proportional oil sampling or manual daily oil sampling). CO_2 emissions must also be determined either through a CEM (e.g., as a diluent for NO_x monitoring) or calculation. Alternate procedures, test methods, and quality assurance/quality control (QA/QC) procedures for CEM are specified (Part 75, Appendices A through I). The acid rain CEM requirements including QA/QC procedures are, in general, more stringent than those specified in the NSPS for Subpart KKKK. New units are required to meet the requirements by not later than 90 days after the unit commences commercial operation.

TABLE 3-1
NATIONAL AND STATE AAQS, ALLOWABLE PSD INCREMENTS, AND SIGNIFICANT IMPACT LEVELS

Pollutant	Averaging Time	National AAQS ($\mu g/m^3$) [a]		Florida AAQS [a] ($\mu g/m^3$)	Significant Impact			
		Primary Standard	Secondary Standard		PSD Increments ($\mu g/m^3$) [a]		Levels ($\mu g/m^3$) [b]	
					Class I	Class II	Class I	Class II
Particulate Matter [c] (PM_{10})	Annual Arithmetic Mean	NA	NA	50	4	17	0.2	1
	24-Hour Maximum	150	150	150	4	30	0.3	5
Particulate Matter [c] ($PM_{2.5}$)	Annual Arithmetic Mean	15	15	NA	NA	NA	NA	NA
	24-Hour Maximum	35	35	NA	NA	NA	NA	NA
Sulfur Dioxide	Annual Arithmetic Mean	80	NA	60	2	20	0.1	1
	24-Hour Maximum	365	NA	260	5	91	0.2	5
	3-Hour Maximum	NA	1,300	1,300	25	512	1.0	25
Carbon Monoxide	8-Hour Maximum	10,000	10,000	10,000	NA	NA	NA	500
	1-Hour Maximum	40,000	40,000	40,000	NA	NA	NA	2,000
Nitrogen Dioxide	Annual Arithmetic Mean	100	100	100	2.5	25	0.1	1
Ozone [d]	1-Hour Maximum [d]	NA	NA	235	NA	NA	NA	NA
	8-Hour Maximum [e]	147	147	NA	NA	NA	NA	NA
Lead	Calendar Quarter Arithmetic Mean	1.5	1.5	1.5	NA	NA	NA	NA

Note: Particulate matter (PM_{10}) = particulate matter with aerodynamic diameter less than or equal to 10 micrometers.
Particulate matter ($PM_{2.5}$) = particulate matter with aerodynamic diameter less than or equal to 2.5 micrometers.
NA = Not applicable, i.e., no standard exists or not promulgated yet.

[a] Short-term maximum concentrations are not to be exceeded more than once per year, except for PM_{10}, $PM_{2.5}$, and O_3 AAQS which are based on a number of expected exceedances.

[b] Maximum concentrations are not to be exceeded.

[c] $PM_{2.5}$: 24-hour standard based on the 3-year averages of the 98th percentile values; annual standard based on 3-year average at community monitors. These standards must be implemented in the 2007-2008 timeframe. On October 17, 2006, EPA finalized the PM AAQS (71 FR 61236). The 24-hour $PM_{2.5}$ standard was changed to 35 $\mu g/m^3$. Annual PM_{10} standard was revoked by EPA. The FDEP has not yet adopted the revised PM_{10} or $PM_{2.5}$ standards.

[d] 1-hour standard of 0.12 ppm was revoked by EPA on June 15, 2005; FDEP has not yet adopted this change.

[e] 8-hour standard was lowered by EPA from 0.08 to 0.075 ppm on March 27, 2008, achieved when the 3-year average of 99th percentile values is 0.075 ppm or less. FDEP had not yet adopted the revised standard.

Sources: Federal Register, Vol. 43, No. 118, June 19, 1978; 40 CFR 50; 40 CFR 52.21; Florida Chapter 62.204, F.A.C.
Golder, 2006.

TABLE 3-2

PSD SIGNIFICANT EMISSION RATES AND *DE MINIMIS* MONITORING CONCENTRATIONS

Pollutant	Regulated Under	Significant Emission Rate (TPY)	*De Minimis* Monitoring Concentration[a] ($\mu g/m^3$)
Sulfur Dioxide	NAAQS, NSPS	40	13, 24-hour
Particulate Matter [PM (TSP)]	NSPS	25	10, 24-hour
Particulate Matter (PM_{10})	NAAQS	15	10, 24-hour
Nitrogen Dioxide	NAAQS, NSPS	40	14, annual
Carbon Monoxide	NAAQS, NSPS	100	575, 8-hour
Volatile Organic Compounds (Ozone)	NAAQS, NSPS	40	100 TPY[b]
Lead	NAAQS	0.6	0.1, 3-month
Sulfuric Acid Mist	NSPS	7	NM
Total Fluorides	NSPS	3	0.25, 24-hour
Total Reduced Sulfur	NSPS	10	10, 1-hour
Reduced Sulfur Compounds	NSPS	10	10, 1-hour
Hydrogen Sulfide	NSPS	10	0.2, 1-hour
Mercury	NESHAP	0.1	0.25, 24-hour

Note: Ambient monitoring requirements for any pollutant may be exempted if the impact of the increase in emissions is below *de minimis* monitoring concentrations.

NAAQS = National Ambient Air Quality Standards.
NM = No ambient measurement method established; therefore, no *de minimis* concentration has been established.
NSPS = New Source Performance Standards.
NESHAP = National Emission Standards for Hazardous Air Pollutants.
$\mu g/m^3$ = micrograms per cubic meter.

[a] Short-term concentrations are not to be exceeded.
[b] No *de minimis* concentration; an increase in VOC or NO_x emissions of 100 TPY or more will require monitoring analysis for ozone.

Sources: 40 CFR 52.21; Rule 62-212.400.

compared to Table 2-9A of this application

TABLE 3-3

MAXIMUM EMISSION CHANGES DUE TO RBEC, INCLUDING EMISSION REDUCTIONS DUE TO THE EXISTING PLANT, COMPARED TO THE PSD SIGNIFICANT EMISSION RATES

Pollutant	Pollutant Emissions		
	Net Emission Changes[a]	Significant Emission Rate	PSD Review
Sulfur Dioxide	-10,797 -10,789	40	No
Particulate Matter [PM (TSP)]	-701 -728	25	No
Particulate Matter (PM_{10})	-701 -728	15	No
Nitrogen Dioxide	-3,305 -3,255	40	No
Carbon Monoxide	-30.5 -66	100	No
Volatile Organic Compounds	√39.7 39.7	40	No
Lead	-0.06 0.12	0.6	No
Sulfuric Acid Mist	-447 489.2	7	No
Total Fluorides	NEG	3	No
Total Reduced Sulfur	NEG	10	No
Reduced Sulfur Compounds	NEG	10	No
Hydrogen Sulfide	NEG	10	No
Mercury	NEG	0.1	No

Note: NEG = Negligible.

[a] A. Based on emissions from operating at base load at 59°F for all pollutants except SO_2:

- 100-percent load, natural gas – 4,880 hours
- 100-percent load with duct burners, natural gas – 2,880 hours
- 100-percent load, oil firing – 1,000 hours

B. SO_2 emissions based on operations at baseload at 59°F:

- 100-percent load, natural gas – 5,880 hours
- 100-percent load with duct burners, natural gas – 2,880 hours

Includes emissions from the fuel heater, emergency generators, auxiliary boiler, fire pump engine, fuel oil storage tank, and gas compressor station (see Tables 2-9A and B, which present the maximum potential emissions for RBEC) and emission reductions from the existing Plant.

C. For the MPS 501G CTs, a plant-wide VOC emission cap is proposed. See Sections 2.3 and 2.4

4.0 CONTROL TECHNOLOGY DESCRIPTION

4.1 Applicability

The PSD regulations require new major stationary sources or major modifications to existing major sources to undergo a control technology review for each pollutant that may potentially be emitted above significant amounts. As discussed in previous sections, PSD review is not required for RBEC and the control technology review requirements of the PSD regulations are not applicable. There are some NSPS regulations which are applicable. Notwithstanding, the emission levels and control technologies proposed for RBEC are consistent with emission levels established as BACT by the FDEP in recent projects. This section presents the proposed emission rates for each pollutant and each proposed emission unit.

4.2 Overview of Proposed Control Technology

The use of clean fuels (i.e., natural gas and ultra low-sulfur light oil), combustion controls, and air pollution control equipment will minimize air emissions and ensure compliance with applicable emission-limiting standards. Using clean fuels will minimize emissions of SO_2, PM/PM_{10}, and other fuel-bound contaminants. Combustion controls will minimize the formation of NO_x and the formation of CO and VOCs by combustor design. Further NO_x reduction will be achieved by SCR. The combination of these techniques has been determined to represent BACT on previous projects based on an evaluation of economic, energy, and environmental impacts. The following subsection presents a summary of the Air Pollution Control Technology proposed for RBEC.

EPA updated NSPS for Stationary Combustion Turbines that will commence construction after February 18, 2005. The Subpart KKKK requirements apply to units with a gross capacity of greater than 1 MW. The Subpart KKKK requirements applicable to combustion turbines greater than 30 MW apply to CT/HRSG trains associated with RBEC. The NO_x emissions are limited to 15 ppm corrected to 15-percent O_2 or 0.43 lb/MW-hr for gas-firing and 42 ppm corrected to 15-percent O_2 or 1.3 lb/MW-hr for light oil firing. For SO_2 emissions, Subpart KKKK requirements limit emissions to 0.9 lb/MW-hr or a potential total sulfur content equivalent to 0.06 pound per million British thermal units (lb/MMBtu) if multiple fuels are fired.

NSPS are also applicable to the auxiliary boiler, fuel heaters, emergency generators, and fire pump engine. The EPA NSPS Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applies to the auxiliary boilers and fuel heaters. For the emergency generators and fire pump engine, NSPS Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, is applicable.

The remainder of this section briefly describes those control technologies that are proposed for RBEC.

4.2.1 Nitrogen Oxides

The Project will result in a net emissions decrease of more than 3,000 TPY for NO_x emissions (i.e., 85-percent reduction from historical actual emissions). PSD review, including a BACT determination, is not applicable. However, the NO_x control technology and emission limits proposed for RBEC are equal to or more stringent than BACT determinations made in Florida and EPA Region IV for similarly designed projects. As proposed for the CTs, the use of DLN combustors and SCR has been established as BACT on combined cycle units with NO_x to low emission levels of 2.0 ppmvd corrected to 15-percent O_2 when firing natural gas and 8.0 ppmvd corrected to 15-percent O_2 when firing ultra low-sulfur light oil. These emission levels are equal to or lower than BACT determinations made in Florida and EPA Region IV for similarly designed projects. Similarly, the NO_x emission rates proposed for the auxiliary boiler, fuel heaters, emergency generators, and gas compressors have been established as BACT in previous PSD permits.

When firing natural gas, NO_x emissions will be controlled using DLN combustors. DLN combustor technology has been offered and installed by CT manufacturers to reduce NO_x emissions by inhibiting thermal NO_x formation through premixing fuel and air prior to combustion and providing pre-mix combustion to reduce flame temperatures. The DLN combustors have premixed fuel zones plus a standard diffusion flame pilot burner for startup. Low-NO_x levels are achieved by introducing fuel primarily to the pre-mix zones and reducing the amount of fuel being combusted from the pilot nozzle.

NO_x emissions will be further controlled by SCR systems when firing either natural gas or ultra low-sulfur light oil. SCR is a post-combustion process where NO_x in the gas stream is reacted with ammonia in the presence of a catalyst to form nitrogen and water. The reaction occurs typically between about 320 and 400 degrees Celsius (°C) (600 and 750°F). These temperatures occur within

the HRSG where the SCR catalyst and ammonia injection grid is installed. Ammonia will be stored onsite in tank(s). The SCR system will be designed for additional NO_x reduction. Flue gas NO_x emissions when firing natural gas will be reduced to 2.0 ppmvd, corrected to 15-percent O_2. When firing ultra low-sulfur light oil, SCR will reduce NO_x emissions by 80 percent or more to 8 ppmvd corrected to 15-percent O_2 or less.

The NO_x emissions from the auxiliary boiler, fuel heaters, emergency generators, fire pump engine, and gas compressors will be limited using combustion techniques. The auxiliary boiler will be equipped with low-NO_x burners to limit NO_x emissions to 0.05 lb/MMBtu. The fuel heaters will use combustion controls to limit NO_x emissions to 0.095 lb/MMBtu. The emergency generators will meet the NSPS Subpart IIII NO_x emission requirements of 6.9 grams per brake horsepower-hour (g/bhp-hr). The gas compressors will be lean burn engines with a maximum NO_x emission rate of 1.5 g/bhp-hr. The fire pump engine will have a maximum NO_x emission rate of 6.8 g/bhp-hr.

4.2.2 Carbon Monoxide

The Project will result in a net CO emissions decrease of about 30 tons per year (i.e., 5-percent decrease from historical actual emissions). PSD review, including a BACT determination, is not applicable. As proposed for this Project, the use combustion controls to limit CO emissions in the range proposed for natural gas and ultra low-sulfur light oil firing has been established as BACT.

The proposed emission rates are based upon the CTs being considered for the converted Plant. The CTs will utilize advanced combustion technology and the proposed emission rates are consistent with those established as BACT for these turbines. The proposed CO emission rates for the MPS 501G Class CTs when firing natural gas are 4.1 ppmvd corrected to 15-percent O_2 at baseload operation and 7.6 ppmvd corrected to 15-percent O_2 with maximum duct firing. When firing oil the CO emissions from the MPS 501G Class CTs or equivalent will be limited to 8 ppmvd corrected to 15-percent O_2. The Siemens H CTs CO emissions will be limited to 5 ppmvd corrected to 15-percent O_2 when firing natural gas at baseload operation and 7.2 ppmvd corrected to 15-percent O_2 when duct firing. For the Siemens H CTs when firing oil, the CO emissions will be limited to 10 ppmvd corrected to 15-percent O_2.

Combustion techniques will be used to limit the CO emissions from the auxiliary boiler, fuel heaters, fire pump engine, and emergency generators. Oxidation catalysts will be installed in the gas compressors to control CO emissions. The auxiliary boiler will be equipped with low-NO_x burners designed to limit CO emissions to 0.08 lb/MMBtu. The fuel heaters will use combustion controls to

limit CO emissions to 0.08 lb/MMBtu. The emergency generators will meet the NSPS Subpart IIII CO emission requirements of 8.5 g/bhp-hr. Each gas compressor will be equipped with an oxidation catalyst to reduce CO emissions by 95 percent and have an emission rate of 0.1 g/bhp-hr. The fire pump engine will have a CO emission rate of 2.6 g/bhp-hr.

The CO emission rates proposed for the auxiliary boiler, fuel heaters, and emergency generators have also been established as BACT in previous PSD permits (e.g., PSD-FL-354 for WCEC Units 3 and 4; PSD-FL-396 for WCEC Unit 3).

4.2.3 Sulfur Oxides (SO_2 and H_2SO_4 Mist)

The Project will result in net emissions decreases of more than 10,000 TPY for SO_2 emissions and 400 TPY for H_2SO_4 mist (i.e., more than 95-percent and 90-percent decreases, respectively, from historical actual emissions). PSD review, including a BACT determination, is not applicable. The only feasible control for the combined cycle unit, auxiliary boiler, fuel heaters, emergency generators, gas compressors, and fire pump engine is combustion of clean fuels. Natural gas and ultra low-sulfur light oil are the cleanest fuels available with maximum sulfur contents of 2 grains/100 scf for natural gas and 0.0015 percent sulfur for ultra low-sulfur light oil proposed for RBEC. Sulfuric acid mist (SAM) emissions will also be minimized by the use of low-sulfur fuels. SO_2 and SAM emission limits based on the use of natural gas and ultra low-sulfur light oil have been established as BACT in previous PSD permits.

4.2.4 Particulate Matter and Other Regulated Pollutants

The Project will result in a net emissions decrease of more than 700 TPY for PM/PM_{10} (i.e., more than 75-percent decrease from historical actual emissions). PSD review, including a BACT determination, is not applicable. The use of clean fuels, characterized by low PM and trace contaminant contents, and advanced combustion techniques result in minimal PM and PM_{10} emissions from the combined cycle unit, auxiliary boiler, fuel heaters, emergency generators, gas compressors, and fire pump engine. Emission limits based on the use of clean fuels (i.e., natural gas and ultra low-sulfur light oil) have been established as BACT for PM/PM_{10} emissions in previous PSD permits.

4.2.5 Volatile Organic Compound

The Project will result in a net emissions increase of less than 40 TPY for VOC with the converted Plant. For the MPS 501G CTs, FPL proposes to implement a plant-wide VOC emission cap to ensure

that the net increase will be less than 40 TPY. Therefore, PSD review, including a BACT determination, is not applicable. Combustion techniques will be used to limit the VOC emissions from the CTs/HRSG duct burners, auxiliary boiler, fuel heaters, emergency generators, gas compressors, and fire pump engine.

The CTs will utilize advanced combustion technology, and the proposed emission rates are consistent with those established as BACT for these turbines. The proposed VOC emission rates for the MPS 501G Class CTs or equivalent when firing natural gas are 1.2 ppmvd corrected to 15-percent O_2 at baseload operation and 1.6 ppmvd corrected to 15-percent O_2 with maximum duct firing. When firing oil, the VOC emissions from the MPS 501G Class CTs will be limited to 6 ppmvd corrected to 15-percent O_2. The Siemens H CTs VOC emissions will be limited to 1.5 ppmvd (corrected to 15-percent O_2) when firing natural gas at baseload operation and 1.9 ppmvd (corrected to 15-percent O_2) when duct firing. For the Siemens H CTs when firing oil, the VOC emissions will be limited to 2 ppmvd corrected to 15-percent O_2.

The auxiliary boiler is designed with proper combustion techniques to limit VOC emissions to 0.005 lb/MMBtu. The fuel heaters will use combustion controls to limit VOC emissions to 0.005 lb/MMBtu. The emergency generators will meet the NSPS Subpart IIII VOC emission requirements of 1 g/bhp-hr as total hydrocarbons. Each gas compressor will be equipped with an oxidation catalyst to reduce VOC emissions 50 percent and an emission rate of 0.16 g/bhp-hr. The fire pump engine will have a VOC emission rate of 1 g/bhp-hr.

TABLE 4-1
PROPOSED EMISSION LIMITS FOR CTS/HRSGS AND DUCT BURNERS FOR RBEC

Pollutant	CT(s)	Fuel	Operating Mode	Proposed Emission Limits	Compliance Methods
NO_x	G and H	Natural Gas	All	2 ppmvd at 15% O_2	Initial: EPA Methods- 7E or 20, Continuous: CEM 30-day rolling average
	G and H	ULSLO	All	8 ppmvd at 15% O_2	Initial: EPA Methods- 7E or 20, Continuous: CEM 30-day rolling average
CO	G	Natural Gas	CT Only	4.1 ppmvd at 15% O_2	Initial: EPA Method 10 (baseload)
		Natural Gas	CT & DB	7.6 ppmvd at 15% O_2	Initial: EPA Methods 10 (baseload and duct firing)
		ULSLO	CT Only	8 ppmvd at 15% O_2	Initial: EPA Method 10 (baseload)
	H	Natural Gas	CT Only	5 ppmvd at 15% O_2	Initial: EPA Method 10 (baseload)
		Natural Gas	CT & DB	7.2 ppmvd at 15% O_2	Initial: EPA Methods 10 (baseload and duct firing)
		ULSLO	CT Only	10 ppmvd at 15% O_2	Initial: EPA Method 10 (baseload)
VOC	G	Natural Gas	CT Only	1.2 ppmvd at 15% O_2	Initial Only: EPA Methods 18 or 25a (baseload)
		Natural Gas	CT & DB	1.6 ppmvd at 15% O_2	Initial Only: EPA Methods 18 or 25a (baseload and duct firing)
		ULSLO	CT Only	6 ppmvd at 15% O_2	Initial Only: EPA Methods 18 or 25a (baseload)
	H	Natural Gas	CT Only	1.5 ppmvd at 15% O_2	Initial Only: EPA Methods 18 or 25a (baseload)
		Natural Gas	CT & DB	1.9 ppmvd at 15% O_2	Initial Only: EPA Methods 18 or 25a (baseload and duct firing)
		ULSLO	CT Only	2 ppmvd at 15% O_2	Initial Only: EPA Methods 18 or 25a (baseload)
PM/PM_{10}	G and H	Natural Gas	CT, CT & DB	10% Opacity	Initial/Annual: EPA Method 9
	G and H	ULSLO	CT	10% Opacity	Initial/Annual: EPA Method 9
SO_2 and SAM	G and H	Natural Gas	CT, CT & DB	2 grains S/100 scf	Initial/Annual: 40 CFR Part 75 Fuel Sampling
	G and H	ULSLO	CT	0.0015% S	Initial/Annual: 40 CFR Part 75 Fuel Sampling

Note: CT = combustion turbine; G = MHI 501G Class CT; H = Siemens H CT; DB = duct burners; ULSLO = ultra low-sulfur light oil.

5.0 AMBIENT MONITORING ANALYSIS

If PSD review is required, FDEP's PSD regulations require that an air quality monitoring analysis be conducted for each criteria and non-criteria pollutant subject to regulation under the Act before a major stationary source or major modification at a major stationary source is constructed. Criteria pollutants are those pollutants for which AAQS have been established. Non-criteria pollutants are those pollutants that may be regulated by emission standards, for which AAQS have not been established. This analysis may be performed by the use of modeling and/or by monitoring the air quality. In addition, if EPA has not established an acceptable ambient monitoring method for the pollutant, monitoring is not required.

For RBEC, the net emissions changes will be less than the PSD significant emission rates. As a result, an air quality monitoring impact analysis is not required by new source review under FDEP air regulations. As a supplement to the Air Construction Permit Application, air quality monitoring data are provided, which demonstrate that Palm Beach County is in attainment of the AAQS for all criteria pollutants. A summary of the maximum pollutant concentrations representative of air quality in Palm Beach County from 2005 through 2008 is presented in Table 5-1. These data indicate that the maximum air quality concentrations measured in the region are well below applicable standards.

The monitoring data are also used to estimate background concentrations that are added to the maximum concentrations predicted for the existing Riviera Plant and RBEC to provide total air quality impacts that can be compared to the AAQS (see Section 6.1).

TABLE 5-1

SUMMARY OF MAXIMUM MEASURED SO_2, NO_2, PM_{10}, $PM_{2.5}$, O_3, AND CO CONCENTRATIONS
2005 THROUGH 2008

Pollutant/ AIRS Site No.	Location	County	Measurement Period Year	Months	Measured Concentration 1-Hour Highest	1-Hour 2nd Highest	3-Hour Highest	3-Hour 2nd Highest	8-Hour Highest	8-Hour 2nd Highest	8-Hour 3-year Average 4th Highest	24-Hour Highest	24-Hour 2nd Highest	Annual Average
Sulfur dioxide	**Florida AAQS**				NA	NA	NA	**0.5 ppm**	NA	NA	NA	NA	**0.1 ppm**	**0.02 ppm**
12-099-3004	Riviera Beach/ 1050 15th Street	Palm Beach	2008	Jan-Sep	NA	NA	0.004	0.004	NA	NA	NA	0.004	0.004	0.0017
			2007	Jan-Dec	NA	NA	0.004	0.004	NA	NA	NA	0.002	0.002	0.0010
			2006	Jan-Dec	NA	NA	0.003	0.002	NA	NA	NA	0.002	0.002	0.0011
			2005	Jan-Dec	NA	NA	0.003	0.003	NA	NA	NA	0.003	0.003	0.0012
Nitrogen dioxide	**Florida AAQS**				NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.053 ppm**
12-099-1004	Palm Beach/ 3700 Belvedere Road	Palm Beach	2008	Jan-Sep	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0075
			2007	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0080
			2006	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0096
			2005	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0086
PM_{10} [a]	**Florida AAQS**				NA	NA	NA	NA	NA	NA	NA	NA	**150 µg/m³**	**50 µg/m³**
12-099-0008	Belle Glade/ 38754 State Road 80	Palm Beach	2008	Jan-Sep	NA	NA	NA	NA	NA	NA	NA	79	49	19.5
			2007	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	60	37	16.5
			2006	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	52	42	20.1
			2005	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	41	38	17.6
12-099-2005	Delray Beach/ 225 South Congress Ave.	Palm Beach	2008	Jan-Sep	NA	NA	NA	NA	NA	NA	NA	60	48	23.3
			2007	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	67	43	23.6
			2006	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	54	49	25.9
			2005	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	79	60	23.5
$PM_{2.5}$ [a]	**Florida AAQS**				NA	NA	NA	NA	NA	NA	NA	NA	**(35 µg/m³)**	**(15 µg/m³)**
12-099-0008	Belle Glade/ 38754 State Road 80	Palm Beach	2008	Jan-Sep	NA	NA	NA	NA	NA	NA	NA	NA	17.1	6.67
			2007	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	18.6	7.19
			2006	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	7.2	4.90
			2005	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	18.8	7.95
12-099-2005	Delray Beach/ 225 South Congress Ave.	Palm Beach	2008	Jan-Sep	NA	NA	NA	NA	NA	NA	NA	NA	17.6	7.34
			2007	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	20.5	7.03
			2006	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	17.0	7.76
			2005	Jan-Dec	NA	NA	NA	NA	NA	NA	NA	NA	17.7	7.84
Ozone [b]	**Florida AAQS**				**NA**	**0.12 ppm**	**NA**	**NA**	**NA**	**NA**	**0.08 ppm**	**NA**	**NA**	**NA**
12-099-0009	Royal Palm Beach/ 980 Crestwood Blvd. N. Wastewater Treatment Plant	Palm Beach	2008	Jan-Sep	0.084	0.074	NA	NA	NA	NA	0.068	NA	NA	NA
			2007	Jan-Dec	0.068	0.066	NA	NA	NA	NA	0.066	NA	NA	NA
			2006	Jan-Dec	0.101	0.093	NA	NA	NA	NA	0.067	NA	NA	NA
			2005	Jan-Dec	0.080	0.079	NA	NA	NA	NA	0.066	NA	NA	NA
12-099-0020	Lantana/ 1199 Lantana Road AG Holley Hospital	Palm Beach	2008	Jan-Sep	0.105	0.070	NA	NA	NA	NA	0.066	NA	NA	NA
			2007	Jan-Dec	0.098	0.092	NA	NA	NA	NA	0.065	NA	NA	NA
			2006	Jan-Dec	0.095	0.086	NA	NA	NA	NA	0.057	NA	NA	NA
			2005	Jan-Dec	0.089	0.078	NA	NA	NA	NA	NA	NA	NA	NA
Carbon monoxide	**Florida AAQS**				**NA**	**35 ppm**	**NA**	**NA**	**NA**	**9 ppm**	**NA**	**NA**	**NA**	**NA**
12-099-1004	Palm Beach/ 3700 Belvedere Road	Palm Beach	2008	Jan-Sep	1.6	1.5	NA	NA	1.1	1.0	NA	NA	NA	NA
			2007	Jan-Dec	2.7	2.1	NA	NA	1.4	1.3	NA	NA	NA	NA
			2006	Jan-Dec	5.8	2.8	NA	NA	1.9	1.8	NA	NA	NA	NA
			2005	Jan-Dec	4.3	3.4	NA	NA	2.7	2.2	NA	NA	NA	NA

Note: NA = not applicable.
AAQS = ambient air quality standard.

[a] On October 17, 2006, EPA promulgated revised PM_{10} and $PM_{2.5}$ AAQS; the $PM_{2.5}$ AAQS had been promulgated on July 18, 1997. For PM_{10}, the annual standard was revoked and the 24-hour standard was retained. The 24-hour $PM_{2.5}$ standard was revised to 35 µg/m³ based on the 3-year averages of the 98th percentile values. The annual $PM_{2.5}$ standard of 15 µg/m³, 3-year averages at community monitors, was retained. As of August 2008, Florida DEP has not yet adopted the revised standards.

[b] On July 18, 1997, EPA promulgated revised AAQS for ozone. The O_3 standard was modified to be 0.08 ppm for the 8-hour average; achieved when the 3-year average of 99th percentile values is 0.08 ppm or less. On March 27, 2008, EPA revised the 8-hour average ozone AAQS to 0.075 ppm, effective May 27, 2008. The format of the standard remained the same as the previous promulgation. As of December 2008, Florida DEP has not yet adopted the revised standards.

6.0 AIR QUALITY IMPACT ANALYSIS

In general, RBEC will significantly improve air quality in the vicinity of the Site. RBEC will reduce actual emissions of air pollutants by more than 17,000 TPY from the existing operation or more than a 90-percent reduction, while improving the general air quality in the vicinity of the Site.

For the RBEC Project, the net emissions changes will be less than the PSD significant emission rates. As a result, an air quality impact analysis is not required by NSR under FDEP air regulations. However, as a supplement to the Air Construction Permit Application, air quality impacts were estimated for the existing Plant and RBEC in the vicinity of the Site for comparison to the AAQS. The general modeling approach followed EPA and FDEP modeling guidelines.

As shown in Table 6-1 and Figure 6-1, the maximum total air quality impacts for both the existing Units 3 and 4 and RBEC are predicted to be well below the AAQS and, therefore, comply with the AAQS. Total air quality impacts include the maximum impacts predicted for the existing Plant or RBEC added to background concentrations. Background concentrations are based on the maximum measured concentration from representative air quality data for the Site (see Section 5.0).

For SO_2, the predicted maximum total impacts for the existing Plant are about 80 percent or less of the AAQS. By comparison, predicted maximum total impacts for RBEC will be less than 10 percent of the AAQS.

For PM_{10}, the predicted maximum total impacts for the existing Plant are less than about 60 percent of the AAQS. By comparison, the predicted maximum total impacts for RBEC will be 55 percent or less of the AAQS. However, as shown in Table 6-1, the predicted maximum impacts for RBEC are less than 50 percent of those from the existing Plant. Background concentrations are the major contributors to the maximum total air quality impacts.

For NO_2 and CO, the predicted maximum total air quality impacts are also primarily due to background concentrations. For both the existing Plant and RBEC, the predicted maximum total NO_2 impacts are about 35 percent or less of the AAQS. The maximum NO_2 impacts for RBEC are predicted along the Site boundary nearest the compressor station, with more than 50 percent due to background concentration. The predicted maximum total CO impacts are predicted to be 30 percent or less of the AAQS, with more than 95 percent due to background concentration.

6.1 Air Modeling Analysis Approach

6.1.1 Air Modeling Scenarios

Several air quality analyses were performed to assess the maximum impacts for the existing Plant and RBEC. For the existing Plant, air quality impacts were predicted for the existing Units 3 and 4, which were added to non-modeled background concentrations (see Section 6.1.8) to produce total air quality impacts. These impacts were then compared to the AAQS for SO_2, NO_2, PM_{10}, and CO.

Similarly, RBEC air quality impacts were predicted for each of the CT vendors and other air emission units for RBEC, such as the fuel heater, gas compressor station, and auxiliary boiler, to produce total air quality impacts, which were then compared to the AAQS for SO_2, NO_2, PM_{10}, and CO.

6.1.2 General Modeling Approach

In general, when model predictions are used to determine compliance with AAQS, current policies stipulate that the highest annual and the HSH short-term (i.e., 24 hours or less) concentrations are compared to the applicable AAQS when using 5 years of meteorological data for the analysis. The HSH concentration is calculated each year for a receptor field by:

1. Eliminating the highest concentration predicted at each receptor;
2. Identifying the second-highest concentration at each receptor; and
3. Selecting the highest concentration among these second-highest concentrations.

The HSH approach is consistent with AAQS, which generally allows a short-term average concentration to be exceeded once per year at each receptor.

The AAQS analysis performed for the Project is a source analysis that evaluates whether the concentrations from sources will comply with the AAQS. These concentrations include the modeled impacts from sources at the Site added to a background concentration. The background concentration accounts for sources not included in the modeling analysis.

6.1.3 Model Selection

The selection of air quality models to calculate air quality impacts for the existing Riviera Plant and RBEC must be based on the models' ability to simulate impacts in the vicinity of the Site. The American Meteorological Society and EPA Regulatory Model (AERMOD) dispersion model was

used to evaluate the pollutant impacts due to the proposed sources at RBEC. AERMOD (Version 07026) is available on the EPA's Internet web site, Support Center for Regulatory Air Models (SCRAM), within the Technology Transfer Network (TTN). A listing of AERMOD model features is presented in Table 6-2.

The EPA and FDEP recommend that AERMOD be used to predict pollutant concentrations at receptors located within 50 km from a source. AERMOD calculates hourly concentrations based on hourly meteorological data. AERMOD is applicable for most analyses since it is recognized as containing the latest scientific algorithms for simulating plume behavior in all types of terrain.

AERMOD was used to predict the maximum pollutant concentrations due to the existing Plant and converted Plant in nearby areas surrounding the Site.

For modeling analyses that will undergo regulatory review, such as determining compliance with AAQS, the following model features are recommended by EPA for rural mode and are referred to as the regulatory default options in AERMOD:

1. Final plume rise at all receptor locations;
2. Stack-tip downwash;
3. Buoyancy-induced dispersion;
4. Default wind speed profile coefficients for rural mode;
5. Default vertical potential temperature gradients; and
6. Calm wind processing.

The EPA regulatory default options were used to address maximum impacts.

6.1.4 Meteorological Data

Meteorological data used in AERMOD to determine air quality impacts consisted of a concurrent 5-year period of hourly surface weather observations and upper air sounding data collected from the National Weather Service (NWS) stations located at the Palm Beach International (KPBI) and Miami International Airports, respectively. The 5-year period of the meteorological data was from 2001 through 2005. The NWS office at KPBI is located approximately 10 km (6 miles) north-northwest of the Site and is the closest primary weather station to the study area considered to have meteorological data representative of the Site.

Since the KPBI meteorological station is only 10 km from the Site and the terrain between the two sites is mostly flat, the wind direction and wind speed frequencies that are experienced at KPBI are considered to be very similar to that experienced at the Site. As such, the KPBI wind direction and wind speed frequencies are considered to be representative of the Site.

A comparison of the average land use parameters at KPBI and the Site was performed using the AERSURFACE program. AERSURFACE reads land use files developed by the U.S. Geological Survey (USGS) and provides average land use values for albedo, Bowen Ratio, and surface roughness within a specified radius based on EPA guidance (i.e., 10 km for albedo and Bowen Ratio; 1 km for surface roughness). The average land uses values of each site were estimated as follows:

Average land use around KPBI:

- Albedo – 0.16;
- Bowen ratio – 0.821; and
- Surface roughness – 0.106 m.

Average land use around the Site:

- Albedo – 0.14;
- Bowen ratio – 0.36; and
- Surface roughness – 0.36 m.

As indicated, the average albedos for the two sites are considered similar. However, the Bowen ratio and surface roughness values for certain areas around the Plant are somewhat different, particularly over water near the Site. Therefore, while the wind direction and wind speed frequencies are considered quite representative of the Site, the Bowen ratio and surface roughness values at KPBI are considered to be less representative for certain directions than that at the Site. It should be noted that in spite of the very flat terrain that is characteristic of south Florida, such differences in land use within even 30 km, are not uncommon or unexpected in this area. Since all of south Florida's major airports are located within the fringe of the large urbanized area, the average Bowen ratio and surface roughness at these areas can be greater than those found in similar areas, but located closer to large water bodies, such as the Site. Consequently, unless a project site is very close to where surface observations are measured, the two sites are not necessarily going to share all of the same meteorological and land use characteristics.

As such, the KPBI meteorological data were selected for the Site, and, in spite of some data differences noted previously, the KPBI data are considered the most representative and are readily

available for modeling of the Site. It should be noted that the KPBI meteorological data have been approved by the FDEP and used for numerous air modeling studies submitted as part of air construction permits approved for sources located in Palm Beach County.

To assess the potential effect that the differences in land use values between the KPBI and Site may have on the maximum predicted concentrations in the vicinity of the Site, the KPBI meteorological data were processed with the land use values developed for the Site. An air modeling analysis was then performed using these data and the results compared with those predicted using the KPBI land use values. The results of this analysis are presented in Appendix C.

These results indicate that, for the Site, incorporation of the Site's land use parameters in the air modeling analysis result in predicted air quality impacts that are similar to those predicted with the KPBI land use parameters.

6.1.5 Emission Inventory

Existing FPL Units – The emissions and stack parameters for the existing Units 3 and 4 at the Riviera Plant are presented in Table 6-3. As discussed in Section 1.0, Units 3 and 4 will be retired prior to RBEC operation.

The operating data for exit gas flow rate and temperature are based on stack tests performed for both units in 2007. Because the operating data were similar for each unit, the values for each unit were averaged together to produce one value for flow rate and temperature for both units. The flow rate was adjusted from the heat input rate from the stack test to the maximum heat input for each unit.

The pollutant emission rates were based on the maximum rate allowed by the permit for each unit (Permit No. 0990042-004-AV,), EPA AP-42 emission factors for combustion of fuel oil, or, in the case of SO_2, the maximum historical sulfur content of 1 percent used over the last 5 years (equivalent to about 1.1 lb/MMBtu). It should be noted that, the existing units have SO_2 emission limits of 1.9 lb/MMBtu for the 3-hour average and 1.3 lb/MMBtu for the 24-hour average.

RBEC Sources – Summaries of the criteria pollutant emission rates, physical stack and stack operating parameters for the CTs for RBEC that were used in the air modeling analysis are presented in Tables 2-1 and 2-2, as well as Appendix A.

lb/hr emission rate × impact

= 79.365 lb/hr

The maximum air quality impacts for RBEC were predicted for a range of possible operating conditions. The emission and stack operating parameters for the CTs are presented for two operating loads and 35°F, 59°F, and 95°F ambient temperatures for the CTs firing both natural gas and oil. A total of 12 modeling scenarios were considered for combined cycle configurations with the CTs operating in the following conditions:

- CTs firing natural gas for ambient temperatures of 35°F, 59°F, and 95°F at:
  - 100 percent operating load, including duct-firing; and
  - 75 percent operating load.
- CTs firing oil for ambient temperatures of 35°F, 59°F, and 95°F at:
  - 100 percent operating load; and
  - 75 percent operating load.

To determine the operating load that produced the maximum impacts from the CTs, an emission rate of 79.365 pounds per hour (lb/hr) or 10 grams per second (g/s) was initially used for the Power Block. Each CT was modeled with 1/3 of these emissions. These modeling results produced relative concentrations as a function of the modeled emission rate (i.e., $\mu g/m^3$ per 10.0 g/s). These impacts are referred to as generic pollutant impacts. Maximum air quality impacts for specific pollutants were then determined by multiplying the maximum pollutant-specific emission rate in lb/hr (g/s) by the maximum predicted generic impact divided by the modeled emission rate [e.g., 79.365 lb/hr (10.0 g/s)].

For these analyses, as a conservative estimate of impacts during natural gas-firing, the pollutant emissions at 100 percent load included duct-firing for every hour in the year even though duct-firing will be limited to 2,880 hr/yr.

The load analysis was performed using the exit gas operating data for the MPS 501G Class CT and Siemens H CT. Once the worst-case operating condition was determined for each CT, subsequent analyses were performed with exit gas operating data specific to each CT vendor.

Additional analyses were performed for SO_2, NO_x, PM_{10}, and CO emissions to address the combined impact of the CTs and other RBEC sources. As noted previously, the exit gas operating data specific to each CT vendor were used. Modeling was performed that included the CTs and fuel heater with the CTs operating load that produced the maximum CT impact from the generic impact analysis. Modeling was also performed that included the CTs, fuel heater, and gas compressor station, again

based on the CTs operating load that produced the maximum CT impact from the generic impact analysis.

A separate air quality analysis was performed for the auxiliary boiler alone, which will be used to assist in startup for one of the CTs. As discussed previously, the combustor for the CTs requires steam for combustor cooling, which normally comes from the HRSG. For startup, an auxiliary boiler is required to supply steam for the combustion process for only one CT. Once sufficient quality and quantity of steam is available from the HRSG, steam from the auxiliary boiler is not required for the other CTs. It was conservatively assumed that the annual operation of the auxiliary boiler would be 500 hr/yr for the startup of the CT.

Detailed descriptions of the other RBEC sources are presented in Tables 2-3 through 2-8 in Section 2.0 and Appendix A.

The proposed CTs will have a HRSG stack height of 149 feet and an inner stack diameter of 22 feet. Because the proposed stack heights are less than GEP, building downwash effects were included in the modeling analysis (see following section on building downwash). In addition, since the stack heights for the other RBEC sources are also less than GEP, building downwash effects were included in the modeling analysis for these sources.

6.1.6 Building Downwash Effects

All significant building structures for RBEC were identified by the Site plot plan (see Figure 2-1). The following building structures were processed in the EPA Building Profile Input Program [(BPIP), Version 04274] program to determine direction-specific building heights and widths for each 10-degree azimuth direction for each source that was included in the modeling analysis:

Structure	Height (feet)	Width (feet)	Length (feet)
CT Air Inlet	97	24	59
HRSG Structure	77	35	90
CT Structure	35	99	24
STG Structure	52	150	43
Compressor Station	20	30	75
Existing Units 3 and 4	137	38	77

As a conservative estimate of potential impacts, the gas compressors were assumed to be in an enclosed building. However, each of the gas compressors may stand-alone and not be enclosed in any structure.

Based on this evaluation, the GEP stack height for the CTs was determined to be 193 feet. Therefore, building downwash effects for the CTs were included in the air modeling analyses. With stack heights of 60 feet or less for the other RBEC sources, building downwash effects were included in the modeling analysis for these sources. The BPIP files are presented in Appendix D.

6.1.7 Receptor Locations

To determine the maximum impact for all pollutants and averaging times in the vicinity of the Site, concentrations were predicted at receptors located in detailed receptor grids centered on the proposed units, the modeling origin, and extended from the Site out to 5 km. Although the terrain around the immediate vicinity is flat, receptor elevations were included at each receptor in the analysis.

Along the Site boundary, a Cartesian receptor grid was used to predict concentrations at 56 receptors spaced at 50-meter intervals. In addition, a general Cartesian grid was used to predict concentrations beyond the Site boundary out to 5 km. Receptors were located at the following intervals and distances from the origin:

- Along the Site boundary or fenceline – 50 m;
- Beyond the fenceline to 2 km – 100 m; and
- From 2 km to 5 km – 250 m.

Concentrations were also predicted at elevated receptors located on the higher elevations of the Palm Beach House, a condominium complex, located about 1,700 ft (530 m) to the south of the Plant. The receptors at the Palm Beach House were located at elevations of 50, 60, 70, 80, and 90 meters to represent the middle to higher elevations of the Palm Beach House.

More than 3,000 receptors were used in the analysis to determine the maximum impacts for the existing and converted Plants and are presented in Appendix D.

6.1.8 Background Concentrations

Background concentrations are necessary to determine total ambient air quality impacts to demonstrate compliance with the AAQS. "Background concentrations" are defined as concentrations

due to sources other than those specifically included in the modeling analysis. For all pollutants, background would include other point sources not included in the modeling, fugitive emission sources, and natural background sources. In general, monitoring data collected near the area in which the air quality impact is performed is used for this purpose.

Summaries of ambient SO_2, PM_{10}, NO_2, and CO concentrations measured are presented in Section 5.0. Based on data collected from 2005 to 2008, the highest annual and second-highest short-term concentrations were selected to represent background concentrations and are as follows:

Pollutant	Averaging Period	Background Concentration (ppm)	Background Concentration ($\mu g/m^3$)
SO_2	3-hour	0.004	10.5
	24-hour	0.004	10.5
	Annual	0.0017	4.4
PM_{10}	24-hour	NA	60
	Annual	NA	25.9
NO_2	Annual	0.0096	18.0
CO	1-hour	3.4	3,891
	8-hour	2.2	2,517

6.2 Model Results

6.2.1 Air Quality Impacts for the Existing FPL Units

Air modeling analyses were performed to determine the maximum total air quality impacts of SO_2, NO_2, PM_{10}, and CO from Units 3 and 4 at the existing Riviera Plant added to background concentrations. A summary of the maximum total air quality predicted for comparison to the AAQS in the Plant's vicinity and at the Palm Beach House is presented in Table 6-4. These results indicate that the maximum pollutant impacts predicted for the existing Plant are less than the AAQS.

The highest annual, HSH 24-hour, and HSH 3-hour SO_2 concentrations are predicted to be 25, 210, and 756 $\mu g/m^3$, respectively. These concentrations are below the annual, 24-hour, and 3-hour SO_2 AAQS of 60, 260, and 1,300 $\mu g/m^3$, respectively.

The highest annual NO_2 concentration is predicted to be 27 $\mu g/m^3$, which is below the annual NO_x AAQS of 100 $\mu g/m^3$.

The highest annual and HSH 24-hour PM_{10} concentrations are 28 and 83 $\mu g/m^3$, respectively. These concentrations are below the annual and 24-hour PM_{10} AAQS of 50 and 150 $\mu g/m^3$, respectively.

The highest HSH 8-hour and HSH 1-hour CO concentrations are predicted to be 2,531 and 3,919 $\mu g/m^3$, respectively. These concentrations are below the 8-hour and 1-hour CO AAQS of 10,000 and 40,000 $\mu g/m^3$, respectively. It should be noted that the background concentrations contribute more than 99 percent to the total air quality impacts.

6.2.2 Air Quality Impacts due to RBEC

The maximum pollutant concentrations predicted for RBEC for the CTs firing natural gas and fuel oil are given in Tables 6-5A and 6-5B for impacts in the Plant's vicinity and at the Palm Beach House, respectively. Based on the worst-case operating condition, two additional modeling analyses were performed. The first analysis included the CTs and fuel heater and the second analysis included the CTs, fuel heater, and gas compressor station. The results of these additional analyses are also presented in Tables 6-5A and 6-5B.

The maximum concentrations for RBEC, including the CTs, fuel heater, and gas compression station as well as background concentrations, for comparison to the AAQS are presented in Tables 6-6A and 6-6B for impacts in the Plant's vicinity and at the Palm Beach House, respectively. As shown in these tables, the modeling results indicate that maximum concentrations are predicted to be less than the AAQS and are comparable among the CT vendors considered.

CTs and Fuel Heater

For the CTs and fuel heater, the highest annual, HSH 24-hour, and HSH 3-hour SO_2 concentrations are predicted to be 5.4, 20, and 52 $\mu g/m^3$, respectively. These concentrations are below the annual, 24-hour, and 3-hour SO_2 AAQS of 60, 260, and 1,300 $\mu g/m^3$, respectively.

The highest annual NO_2 concentration is predicted to be 20 $\mu g/m^3$, which is below the annual NO_x AAQS of 100 $\mu g/m^3$.

The highest annual and HSH 24-hour PM_{10} concentrations are 27 and 68 $\mu g/m^3$, respectively. These concentrations are below the annual and 24-hour PM_{10} AAQS of 50 and 150 $\mu g/m^3$, respectively.

The highest HSH 8-hour and HSH 1-hour CO concentrations are predicted to be 2,610 and 4,125 $\mu g/m^3$, respectively. These concentrations are below the 8-hour and 1-hour CO AAQS of 10,000 and 40,000 $\mu g/m^3$, respectively. Similar to the air quality impacts predicted for the existing FPL units, the background concentrations contribute more than 99 percent to the total air quality impacts.

CTs, Fuel Heater, and Gas Compressor Station

For the CTs, fuel heater, and gas compressor station, the results are similar to or slightly higher than those for the CTs and fuel heater alone. The highest annual, HSH 24-hour, and HSH 3-hour SO_2 concentrations are predicted to be 5.4, 20, and 52 $\mu g/m^3$, respectively. These concentrations are below the annual, 24-hour, and 3-hour SO_2 AAQS of 60, 260, and 1,300 $\mu g/m^3$, respectively.

The highest annual NO_2 concentration is predicted to be 35 $\mu g/m^3$, which is below the annual NO_x AAQS of 100 $\mu g/m^3$.

The highest annual and HSH 24-hour PM_{10} concentrations are 27 and 68 $\mu g/m^3$, respectively. These concentrations are below the annual and 24-hour PM_{10} AAQS of 50 and 150 $\mu g/m^3$, respectively.

The highest HSH 8-hour and HSH 1-hour CO concentrations are predicted to be 2,610 and 4,125 $\mu g/m^3$, respectively. These concentrations are below the 8-hour and 1-hour CO AAQS of 10,000 and 40,000 $\mu g/m^3$, respectively. Again, the background concentrations contribute more than 99 percent to the total air quality impacts.

Auxiliary Boiler

The maximum concentrations for the auxiliary boiler for the converted Plant with background concentrations, for comparison to the AAQS are presented in Table 6-7. It should be noted that the auxiliary boiler is needed only for the MPS 501G1 and MPS 501G1PLUS CT for startup of the CT. As shown in Table 6-7, the modeling results indicate that maximum concentrations due to the auxiliary boiler are also predicted to be less than the AAQS and are similar to those predicted for the CTs and other RBEC sources.

The highest annual, HSH 24-hour, and HSH 3-hour SO_2 concentrations are predicted to be 4.5, 14, and 17 $\mu g/m^3$, respectively. These concentrations are below the annual, 24-hour, and 3-hour SO_2 AAQS of 60, 260, and 1,300 $\mu g/m^3$, respectively.

The highest annual NO_2 concentration is predicted to be 18 $\mu g/m^3$, which is below the annual NO_x AAQS of 100 $\mu g/m^3$.

The highest annual and HSH 24-hour PM_{10} concentrations are 26 and 61 $\mu g/m^3$, respectively. These concentrations are below the annual and 24-hour PM_{10} AAQS of 50 and 150 $\mu g/m^3$, respectively.

The highest HSH 8-hour and HSH 1-hour CO concentrations are predicted to be 2,589 and 4,008 $\mu g/m^3$, respectively. These concentrations are below the 8-hour and 1-hour CO AAQS of 10,000 and 40,000 $\mu g/m^3$, respectively.

Examples of the modeling input and summary files are provided in Appendix E.

6.3 Conclusions

Based on these air quality modeling analyses, the maximum pollutant concentrations due to RBEC are predicted to be less than the AAQS and will comply with all applicable AAQS. Indeed, the modeling results clearly demonstrate that Florida's air quality will be protected and be improved with the converted Plant. This is demonstrated by Figure 6-1, which presents the maximum total air quality impacts predicted for the existing Units 3 and 4 and RBEC compared to the AAQS. As shown in Figure 6-1, there is improvement in the maximum total air quality concentrations for SO_2 and PM_{10} with RBEC. As discussed earlier, the maximum annual NO_2 concentrations are predicted to be higher for RBEC, but are still well below the AAQS. The predicted impacts for RBEC are primarily due to the gas compressor station. Moreover, there is a reduction in NO_x emissions by over 3,000 TPY with the RBEC Project. The maximum total CO impacts for RBEC are predicted to be much lower than the AAQS, with more than 95 percent due to background concentration.

In conclusion, RBEC will reduce actual emissions of air pollutants by more than 17,000 TPY from the existing operation, or more than 90-percent reduction, while improving the general air quality in the vicinity of the Site. Indeed, the maximum generating capacity of RBEC is about 100 percent higher than the existing units. This will be accomplished using the cleanest fuels, advanced combustion technology and additional control for NO_x emissions.

TABLE 6-1
SUMMARY OF PREDICTED POLLUTANT CONCENTRATIONS
FOR THE EXISTING RIVIERA PLANT AND RBEC
COMPARED TO AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Maximum Concentration (ug/m^3) [a]		Total Concentration (ug/m^3) including Background [b]		Ambient Air Quality Standard (AAQS) ($\mu g/m^3$)
		Existing Units 3&4 Only	RBEC Only [c]	Units 3&4	RBEC [c]	
SO_2	Annual	20.6	0.9	25.0	5.4	60
	24-Hour	199	9.1	210	19.6	260
	3-Hour	746	41.7	756	52.2	1,300
PM_{10}	Annual	2.3	0.9	28.2	26.8	50
	24-Hour	22.7	8.3	82.7	68.3	150
NO_2	Annual	8.7	17.1	26.7	35.2	100
CO	8-Hour	13.8	92.5	2,531	2,610	10,000
	1-Hour	28.0	234	3,919	4,125	40,000

[a] Based on maximum concentrations predicted in general grid in the plant vicinity and at Palm Beach House.

[b] Background concentration based on the maximum measured concentration from representative air quality data for the Site.

[c] RBEC sources include the 3 CTs/HRSGs, fuel heater, and gas compressors.

TABLE 6-2

MAJOR FEATURES OF THE AERMOD MODEL, VERSION 07026

AERMOD Model Features
• Plume dispersion/growth rates are determined by the profile of vertical and horizontal turbulence, vary with height, and use a continuous growth function.
• In a convective atmosphere, uses three separate algorithms to describe plume behavior as it comes in contact with the mixed layer lid; in a stable atmosphere uses a mechanically mixed layer near the surface.
• Polar or Cartesian coordinate systems for receptor locations can be included directly or by an external file reference.
• Urban model dispersion is input as a function of City size and population density; sources can also be modeled individually as urban sources.
• Stable plume rise: uses Briggs equations with winds and temperature gradients at stack top up to half way up to plume rise. Convective plume rise: plume superimposed on random convective velocities.
• Procedures suggested by Briggs (1974) for evaluating stack-tip downwash.
• Has capability of simulating point, volume, area, and multi-sized area sources.
• Accounts for the effects of vertical variations in wind and turbulence (Brower et al., 1998).
• Uses measured and computed boundary layer parameters and similarity relationships to develop vertical profiles of wind, temperature, and turbulence (Brower et al., 1998).
• Concentration estimates for 1-hour to annual average times.
• Creates vertical profiles of wind, temperature, and turbulence using all available measurement levels.
• Terrain features are depicted by use of a controlling hill elevation and a receptor point elevation.
• Modeling domain surface characteristics are determined by selected direction and month/season values of surface roughness length, Albedo, and Bowen ratio.
• Contains both a mechanical and convective mixed layer height, the latter based on the hourly accumulation of sensible heat flux.
• The method of Pasquill (1976) to account for buoyancy-induced dispersion.
• A default regulatory option to set various model options and parameters to EPA-recommended values.
• Contains procedures for calm-wind and missing data for the processing of short term averages.

Note: AERMOD = The American Meteorological Society and Environmental Protection Agency Regulatory Model.

Source: EPA, 2007.

TABLE 6-3
EXISTING FPL RIVIERA PLANT, UNITS 3 AND 4
STACK, OPERATING, AND EMISSION DATA

Parameter	Units	Operating and Emission Data	
		Unit 3	Unit 4
Stack Data			
Height	feet	298	298
Diameter	feet	16.0	16.0
Operating Data [a]			
Heat input[b]	MMBtu/hr	3,050	3,050
Temperature	°F	291	291
Flow rate	acfm	1,154,617	1,154,617
Velocity	ft/sec	95.7	95.7
Maximum Hourly Emissions			
SO_2	lb/MMBtu[c]	1.10	1.10
	lb/hr	3,355	3,355
PM/PM_{10}	lb/MMBtu [b,d]	0.125	0.125
	lb/hr	381	381
NO_x	lb/MMBtu [b]	0.62	0.62
	lb/hr	1,891	1,891
CO	lb/MMBtu [e]	0.03	0.03
	lb/hr	101.0	101.0

[a] Stack and operating parameters based on 2007 stack test data, using average flow rate and temperature.

[b] Based on Permit No. 0990043-003-AV

[c] Based on use of maximum historical sulfur fuel oil content of 1 percent.

[d] Based on 0.3 lb/MMBtu for 3 hr/day and 0.1 lb/MMBtu for 21 hr/day.

[e] Based on AP-42 emission factor for combustion for No. 6 fuel oil (Table 1.3-1, U.S. EPA, 1998) and 152 MMBtu/1,000 gal: CO: 5 lb/1000 gal

TABLE 6-4
SUMMARY OF POLLUTANT CONCENTRATIONS PREDICTED FOR THE EXISTING RIVIERA PLANT COMPARED TO AMBIENT AIR QUALITY STANDARDS

Pollutant	Emission Basis (lb/MMBtu)	Emission Rate Per Unit (lb/hr)	Averaging Time	Units 3 & 4 Maximum Concentration [a] ($\mu g/m^3$)	Background Concentration [b] ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	Ambient Air Quality Standard (AAQS) ($\mu g/m^3$)
General Grid Impacts							
SO_2	1.10	3,355	Annual	20.6	4.4	25.0	60
			24-Hour	105	10.5	116	260
			3-Hour	268	10.5	279	1,300
PM_{10}	0.125	381	Annual	2.3	25.9	28.2	50
			24-Hour	11.9	60.0	71.9	150
NO_x [c]	0.62	1,891	Annual	8.7	18.0	26.7	100
CO	0.03	101.0	8-Hour	6.6	2,517	2,524	10,000
			1-Hour	8.9	3,890	3,899	40,000
Palm Beach House Impacts							
SO_2	1.10	3,355	Annual	15.1	4.4	19.5	60
			24-Hour	199	10.5	210	260
			3-Hour	746	10.5	756	1,300
PM_{10}	0.125	381	Annual	1.7	25.9	27.6	50
			24-Hour	22.7	60.0	82.7	150
NO_x [c]	0.62	1,891	Annual	6.4	18.0	24.4	100
CO	0.03	101	8-Hour	13.8	2,517	2,531	10,000
			1-Hour	28.0	3,890	3,919	40,000

[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively.
Based on highest annual and highest, second-highest short-term average concentrations predicted for the units, by ratioing modeled rate to pollutant specific rate:

Modeled Rate (lb/hr)	Averaging Time	Predicted Concentration (ug/m^3) General Grid	Predicted Concentration (ug/m^3) Condominiums
79.37	Annual	0.243	0.178
	24-Hour	1.243	2.358
	8-Hour	2.591	5.426
	3-Hour	3.172	8.820
	1-Hour	3.495	11.013

[b] Based on highest annual and second-highest short-term average concentrations measured at representative monitoring stations nearest the Site.
[c] NO_x to NO_2 conversion factor of 0.75 applied to modeled NO_x impacts based on EPA Modeling Guidelines.

TABLE 6-5A
SUMMARY OF MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED
FOR NATURAL GAS- AND DISTILLATE FUEL OIL-FIRING
FOR RBEC IN GENERAL GRID

Pollutant	Averaging Time	MPS 501G Class Maximum Predicted Concentration ($\mu g/m^3$) Natural Gas	Fuel Oil	Maximum	Siemens H Maximum Predicted Concentration ($\mu g/m^3$) Natural Gas	Fuel Oil	Maximum
CTs Only [a]							
SO_2	Annual	0.37	0.04	0.37	0.31	0.036	0.31
	24-Hour	2.16	0.25	2.16	1.88	0.24	1.88
	3-Hour	7.3	1.09	7.3	6.11	1.05	6.11
PM_{10}	Annual	0.24	0.39	0.26	0.29	0.43	0.30
	24-Hour	1.36	2.54	2.54	1.81	2.59	2.59
NO_2	Annual [c]	0.36	0.57	0.39	0.31	0.65	0.35
CO	8-Hour	15.6	45.8	45.8	16.0	12.7	16.0
	1-Hour	34.5	101.9	101.9	28.6	28.2	28.6
CTs and Fuel Heater							
SO_2	Annual	0.39	NM	0.39	0.32	NM	0.32
	24-Hour	2.17	NM	2.17	1.90	NM	1.90
	3-Hour	7.2	NM	7.2	5.3	NM	5.3
PM_{10}	Annual	NM	0.40	0.40	NM	0.43	0.43
	24-Hour	NM	2.54	2.54	NM	2.60	2.60
NO_2	Annual [c]	NM	1.65	1.65	NM	1.65	1.65
CO	8-Hour	NM	45.9	45.9	19.6	NM	19.6
	1-Hour	NM	102.2	102.2	34.4	NM	34.4
CTs, Fuel Heater, and Gas Compressors [b]							
SO_2	Annual	0.46	NM	0.46	0.42	NM	0.42
	24-Hour	2.88	NM	2.88	2.89	NM	2.89
	3-Hour	7.3	NM	7.3	5.4	NM	5.4
PM_{10}	Annual	NM	0.63	0.63	NM	0.65	0.65
	24-Hour	NM	4.71	4.71	NM	4.73	4.73
NO_2	Annual [c]	NM	17.14	17.14	NM	17.14	17.14
CO	8-Hour	NM	74.5	74.5	74.5	NM	74.5
	1-Hour	NM	147.8	147.8	147.8	NM	147.8

[a] Based on pollutant emissions for each vendor.
Maximum annual average concentrations are based on prorating the maximum impacts for each operation by the following maximum number of hours requested for that operation:

Pollutant	Hours for Each Operation: Natural Gas with Duct-Firing	Fuel Oil	Total
SO_2	8,760	0	8,760
PM_{10}	7,760	1,000	8,760
NO_2	7,760	1,000	8,760

[b] Maximum impacts based on operating data for each vendor and worst-case conditions from CT load analysis:
For SO_2, MPS: gas-firing at 100% load, 95 °F (24-hour); Siemens: gas-firing at 75% load, 35 °F (24-hour);
for NO_2, MPS: oil-firing at 100% load, 59 °F; Siemens: oil-firing at 75% load, 59 °F;
for PM_{10}, MPS: oil-firing at 75% load, 35 °F; Siemens: oil-firing at 75% load, 95 °F;
for CO, MPS: oil-firing at 75% load, 35 °F; Siemens: gas-firing at 75% load, 35 °F.

[c] NO_x to NO_2 conversion factor based on EPA Modeling Guidelines: 75 %.

Note: NM = Not Modeled.

TABLE 6-5B
SUMMARY OF MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED
FOR NATURAL GAS- AND DISTILLATE FUEL OIL-FIRING
FOR RBEC AT PALM BEACH HOUSE

Pollutant	Averaging Time	MPS 501G Class Maximum Predicted Concentration ($\mu g/m^3$) Natural Gas	Fuel Oil	Maximum	Siemens H Maximum Predicted Concentration ($\mu g/m^3$) Natural Gas	Fuel Oil	Maximum
CTs Only [a]							
SO_2	Annual	0.31	0.023	0.31	0.26	0.024	0.26
	24-Hour	3.41	0.26	3.41	2.89	0.251	2.89
	3-Hour	14.74	0.79	14.74	12.83	0.89	12.83
PM_{10}	Annual	0.20	0.25	0.20	0.25	0.29	0.26
	24-Hour	2.15	2.62	2.62	2.75	3.01	3.01
NO_2	Annual [c]	0.301	0.350	0.31	0.26	0.43	0.28
CO	8-Hour	30.0	34.0	34.0	31.6	10.3	31.6
	1-Hour	80.9	78.8	80.9	85.0	23.8	85.0
CTs and Fuel Heater							
SO_2	Annual	0.93	NM	0.93	0.79	NM	0.79
	24-Hour	10.21	NM	10.21	8.67	NM	8.67
	3-Hour	44.1	NM	44.1	38.5	NM	38.5
PM_{10}	Annual	NM	0.73	0.73	NM	0.87	0.87
	24-Hour	NM	7.88	7.88	NM	9.02	9.02
NO_2	Annual [c]	NM	1.05	1.05	NM	1.28	1.28
CO	8-Hour	NM	102.1	102.1	94.9	NM	94.9
	1-Hour	NM	236.5	236.5	254.8	NM	254.8
CTs, Fuel Heater, and Gas Compressors [b]							
SO_2	Annual	0.94	NM	0.94	0.80	NM	0.80
	24-Hour	10.22	NM	10.22	8.69	NM	8.69
	3-Hour	44.1	NM	44.1	38.5	NM	38.5
PM_{10}	Annual	NM	0.74	0.74	NM	0.88	0.88
	24-Hour	NM	7.89	7.89	NM	9.05	9.05
NO_2	Annual [c]	NM	2.64	2.64	NM	2.67	2.67
CO	8-Hour	NM	102.1	102.1	95.5	NM	95.5
	1-Hour	NM	236.5	236.5	254.8	NM	254.8

[a] Based on pollutant emissions for each vendor.
Maximum annual average concentrations are based on prorating the maximum impacts for each operation by the following maximum number of hours requested for that operation:

Pollutant	Hours for Each Operation: Natural Gas with Duct-Firing	Fuel Oil	Total
SO_2	8,760	0	8,760
PM_{10}	7,760	1,000	8,760
NO_2	7,760	1,000	8,760

[b] Maximum impacts based on operating data for each vendor and worst-case conditions from CT load analysis:
For SO_2, MPS: gas-firing at 100% load, 95 °F; Siemens: gas-firing at 75% load, 35 °F (24-hour);
for NO_2, MPS: oil-firing at 100% load, 59 °F; Siemens: oil-firing at 75% load, 59 °F;
for PM_{10}, MPS: oil-firing at 75% load, 35 °F (24-hour); Siemens: oil-firing at 75% load, 95 °F;
for CO, MPS: oil-firing at 75% load, 95 °F; Siemens: gas-firing at 75% load, 35 °F.

[c] NO_x to NO_2 conversion factor based on EPA Modeling Guidelines: 75 %.

Note: NM = Not Modeled.

TABLE 6-6A
MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED FOR RBEC IN GENERAL GRID COMPARED TO THE AAQS

Pollutant	Averaging Time	MPS 501G Class Maximum Predicted Concentration ($\mu g/m^3$) CCEC [a]	Background [b]	Total	Siemens H Maximum Predicted Concentration ($\mu g/m^3$) CCEC [a]	Background [b]	Total	AAQS ($\mu g/m^3$)
CTs and Fuel Heater								
SO_2	Annual	0.39	4.4	4.83	0.32	4.4	4.76	60
	24-Hour	1.80	10.5	12.3	1.47	10.5	11.9	260
	3-Hour	5.3	10.5	15.7	4.3	10.5	14.8	1,300
PM_{10}	Annual	0.40	25.9	26.3	0.43	25.9	26.3	50
	24-Hour	2.00	60.0	62.0	2.15	60.0	62.1	150
NO_2	Annual	1.65	18.0	19.7	1.65	18.0	19.7	100
CO	8-Hour	28.8	2,517	2,546	16.2	2,517	2,534	10,000
	1-Hour	85.3	3,890	3,976	34.2	3,890	3,925	40,000
CTs, Fuel Heater, and Gas Compressors								
SO_2	Annual	0.46	4.4	4.91	0.42	4.4	4.87	60
	24-Hour	2.70	10.5	13.2	2.71	10.5	13.2	260
	3-Hour	5.3	10.5	15.8	4.4	10.5	14.9	1,300
PM_{10}	Annual	0.63	25.9	26.5	0.65	25.9	26.6	50
	24-Hour	4.40	60.0	64.4	4.41	60.0	64.4	150
NO_2	Annual	17.14	18.0	35.2	17.14	18.0	35.2	100
CO	8-Hour	71.3	2,517	2,589	71.3	2,517	2,589	10,000
	1-Hour	141.4	3,890	4,032	141.4	3,890	4,032	40,000

[a] Based on highest annual and highest, second-highest short-term average concentrations predicted for the project.

[b] Based on highest annual and second-highest short-term average concentrations measured at representative monitoring stations nearest the Site.

TABLE 6-6B
MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED
FOR RBEC AT PALM BEACH HOUSE
COMPARED TO THE AAQS

Pollutant	Averaging Time	MPS 501G Class Maximum Predicted Concentration ($\mu g/m^3$) CCEC [a]	Background [b]	Total	Siemens H Maximum Predicted Concentration ($\mu g/m^3$) CCEC [a]	Background [b]	Total	AAQS ($\mu g/m^3$)
CTs and Fuel Heater								
SO_2	Annual	0.93	4.4	5.38	0.79	4.4	5.24	60
	24-Hour	9.09	10.5	19.5	7.89	10.5	18.4	260
	3-Hour	41.7	10.5	52.2	36.2	10.5	46.7	1,300
PM_{10}	Annual	0.73	25.9	26.6	0.87	25.9	26.8	50
	24-Hour	6.89	60.0	66.9	8.22	60.0	68.2	150
NO_2	Annual	1.05	18.0	19.1	1.28	18.0	19.3	100
CO	8-Hour	92.5	2,517	2,610	83.6	2,517	2,601	10,000
	1-Hour	234	3,890	4,124	234	3,890	4,125	40,000
CTs, Fuel Heater, and Gas Compressors								
SO_2	Annual	0.94	4.4	5.38	0.80	4.4	5.24	60
	24-Hour	9.1	10.5	19.6	7.9	10.5	18.4	260
	3-Hour	41.7	10.5	52.2	36.2	10.5	46.7	1,300
PM_{10}	Annual	0.74	25.9	26.6	0.88	25.9	26.8	50
	24-Hour	6.93	60.0	66.9	8.25	60.0	68.3	150
NO_2	Annual	2.64	18.0	20.7	2.67	18.0	20.7	100
CO	8-Hour	92.5	2,517	2,610	84.3	2,517	2,602	10,000
	1-Hour	233.9	3,890	4,124	234.4	3,890	4,125	40,000

[a] Based on highest annual and highest, second-highest short-term average concentrations predicted for the project.

[b] Based on highest annual and second-highest short-term average concentrations measured at representative monitoring stations nearest the Site.

TABLE 6-7
SUMMARY OF POLLUTANT CONCENTRATIONS PREDICTED FOR THE RBEC AUXILIARY BOILER COMPARED TO AMBIENT AIR QUALITY STANDARDS

Pollutant	Emission Rate	Units	Averaging Time	Maximum Concentration [a,d] ($\mu g/m^3$)	Background Concentration [b] ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	Ambient Air Quality Standard (AAQS) ($\mu g/m^3$)
SO_2	0.14	TPY	Annual	0.026	4.4	4.5	60
	0.54	lb/hr	24-Hour	3.4	10.5	13.8	260
	0.54	lb/hr	3-Hour	6.2	10.5	16.6	1,300
PM_{10}	0.17	TPY	Annual	0.03	25.9	25.9	50
	0.70	lb/hr	24-Hour	1.1	60.0	61.1	150
NO_x [c]	1.25	TPY	Annual	0.18	18.0	18.2	100
CO	7.98	lb/hr	8-Hour	71.7	2,517	2,589	10,000
	7.98	lb/hr	1-Hour	117.9	3,890	4,008	40,000

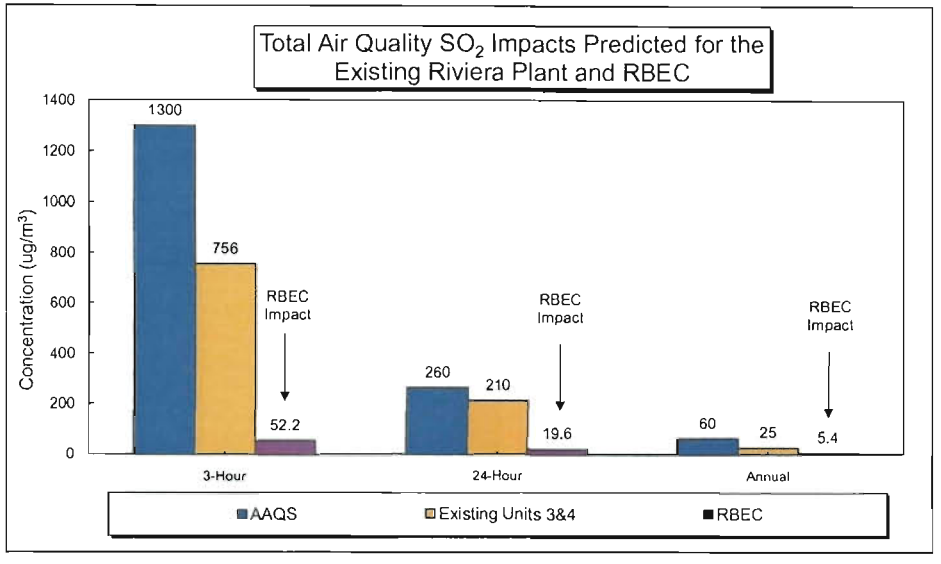
[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively. Based on highest annual and highest short-term average concentrations predicted for the units, by ratioing modeled rate to pollutant specific rate:

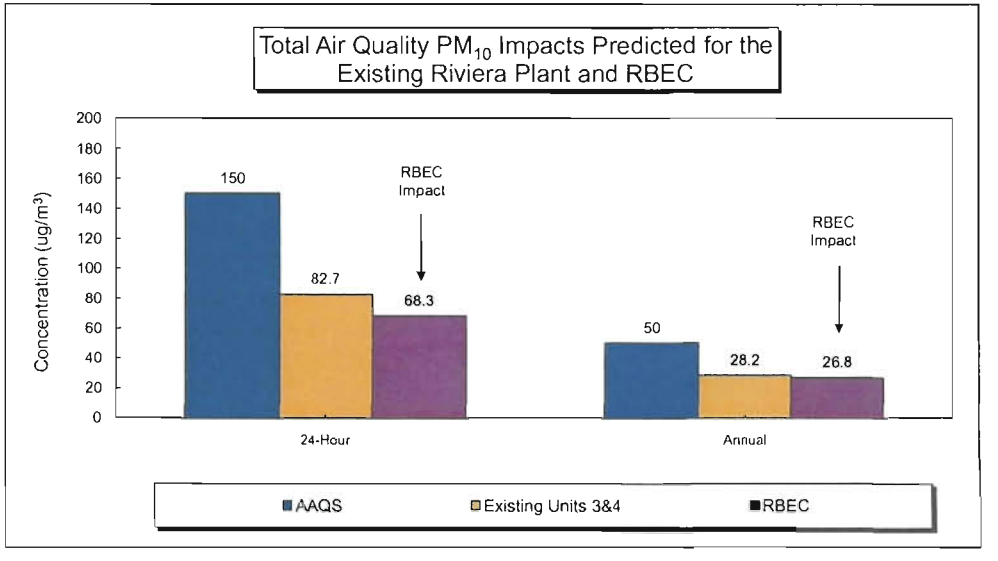
Modeled Rate (lb/hr)	Averaging Time	Predicted Concentration ($\mu g/m^3$)
79.37	Annual	33.3
	24-Hour	247.1
	8-Hour	356.4
	3-Hour	454.4
	1-Hour	586.4

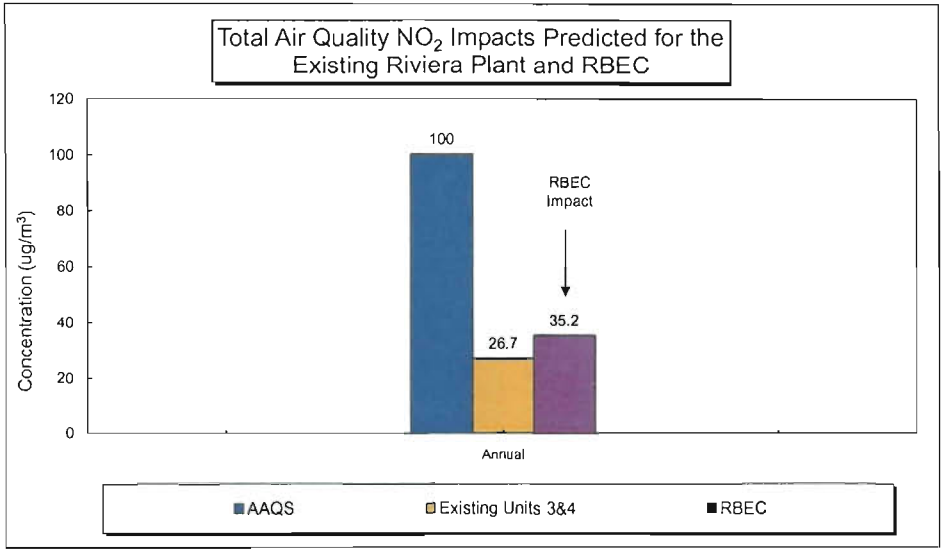
[b] Based on highest annual and second-highest short-term average concentrations measured at representative monitoring stations nearest the Site.

[c] NO_x to NO_2 conversion factor of 0.75 applied to modeled NO_x impacts based on EPA Modeling Guidelines.

[d] Based on 500 hours/yr operation.







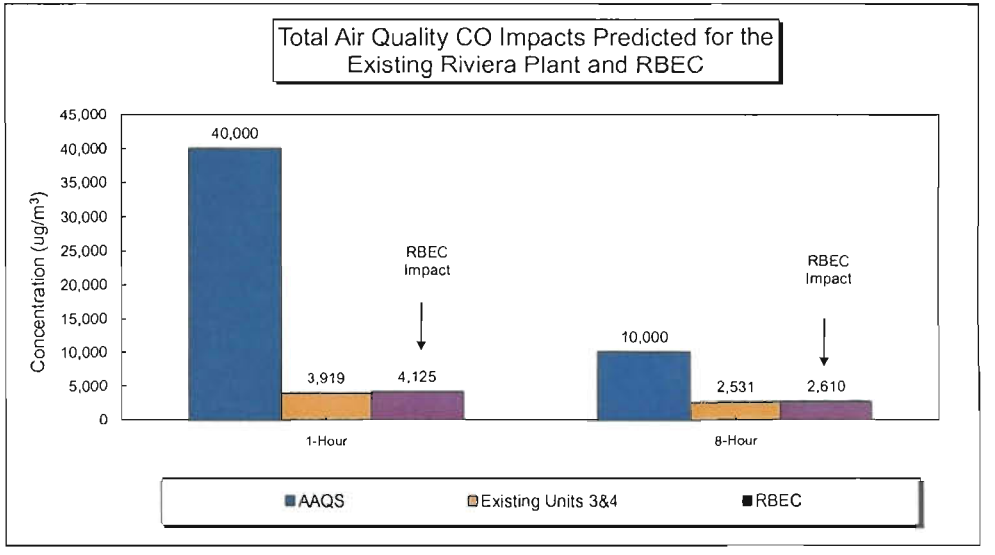


Figure 6-1.
Maximum Total Air Quality Impacts of the Existing Units 3 & 4 and RBEC Compared to Ambient Air Quality Standards

CCEC/Appendix 10.2.5

Source: Golder, 2009.

FPL

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APPENDIX A

EXPECTED PERFORMANCE AND EMISSION INFORMATION

TABLE A-1-501G CLASS
DESIGN INFORMATION AND STACK PARAMETERS FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

	CT Only Turbine Inlet Temperature				CT with Duct Burner Turbine Inlet Temperature			
Parameter	**35 °F**	**59 °F**	**75 °F**	**95 °F**	**35 °F w/DB**	**59 °F w/DB**	**75 °F w/DB**	**95 °F w/DB**
Combustion Turbine Performance								
Heat Input (MMBtu/hr, LHV)	2,509	2,406	2,324	2,242	2,509	2,406	2,324	2,242
(MMBtu/hr, HHV)	2,785	2,671	2,580	2,489	2,785	2,671	2,580	2,489
Evaporative Cooler	Off	On	On	On	Off	Off	Off	Off
Relative Humidity (%)	60	60	60	50	40	60	60	50
Fuel heating value (Btu/lb, LHV)	20,909	20,909	20,909	20,909	20,909	20,909	20,909	20,909
(Btu/lb, HHV)	23,209	23,209	23,209	23,209	23,209	23,209	23,209	23,209
(HHV/LHV)	1.110	1.110	1.110	1.110	1.110	1.110	1.110	1.110
Steam Flow (lb/hr)	NA	NA	NA	NA	NA	NA	NA	NA
Duct Burner (DB)								
Heat input (MMBtu/hr, HHV)	0	0	0	0	475	475	475	475
(MMBtu/hr, LHV)	0	0	0	0	427.9	427.9	427.9	427.9
CT/DB Exhaust Flow								
Mass Flow (lb/hr)- provided	5,117,000	4,928,000	4,772,000	4,601,000	5,137,642.9	4,948,643	4,792,643	4,621,644
- provided	NA	NA	NA	NA				
Temperature (°F) - provided	1126	1135	1144	1156	1,126	1,135	1,144	1,156
Moisture (% Vol.)	8.30	9.04	9.77	10.91	9.61	10.39	11.15	12.33
Oxygen (% Vol.)	12.00	11.89	11.78	11.56	10.55	10.39	10.23	9.97
Molecular Weight	28.42	28.33	28.25	28.12	28.35	28.27	28.18	28.05
Volume flow (acfm) - calculated	3,481,669	3,382,811	3,303,538	3,223,823	3,504,027	3,404,768	3,325,831	3,245,994
Fuel Usage								
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]								
Heat input (MMBtu/hr, LHV)	2,509	2,406	2,324	2,242	2,509	2,406	2,324	2,242
Heat content (Btu/lb, LHV)	20,909	20,909	20,909	20,909	20,909	20,909	20,909	20,909
Fuel usage (lb/hr)- provided	120,000	115,100	111,180	107,260	120,000	115,100	111,180	107,260
- calculated	119,997	115,085	111,164	107,243	119,997	115,085	111,164	107,243
Heat content (Btu/cf, LHV)- assumed	918	918	918	918	918	918	918	918
Fuel density (lb/ft^3)	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439	0.0439
Fuel usage (cf/hr)- calculated	2,733,204	2,621,598	2,532,313	2,443,029	2,733,204	2,621,598	2,532,313	2,443,029
Fuel Usage - Duct Burner Only								
Fuel usage (lb/hr)- calculated	0	0	0	0	20,466	20,466	20,466	20,466
Fuel usage (cf/hr)- calculated	0	0	0	0	466,152	466,152	466,152	466,152
HRSG Stack								
HRSG - Stack Height (feet)	149	149	149	149	149	149	149	149
Diameter (feet)	22	22	22	22	22	22	22	22
HRSG Stack Flow Conditions								
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)² /4) x 3.14159] / 60 sec/min								
Mass flow (lb/hr)	5,117,000	4,928,000	4,772,000	4,601,000	5,137,643	4,948,643	4,792,643	4,621,644
HRSG Stack Temperature (°F)	196	195	195	195	186	185	185	184
Molecular weight	28.42	28.33	28.25	28.12	28.35	28.27	28.18	28.05
Volume flow (acfm)	1,440,085	1,388,967	1,348,601	1,307,085	1,426,797	1,375,782	1,336,553	1,293,376
Diameter (feet)	22	22	22	22	22	22	22	22
Velocity (ft/sec)- calculated	63.1	60.9	59.1	57.3	62.6	60.3	58.6	56.7

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft² (@14.67 psia).
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-2-501G CLASS
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

	CT Only Turbine Inlet Temperature				CT with Duct Burner Turbine Inlet Temperature			
Parameter	**35 °F**	**59 °F**	**75 °F**	**95 °F**	**35 °F w/DB**	**59 °F w/DB**	**75 °F w/DB**	**95 °F w/DB**
Particulate from CT, DB, and HRSG								
Total PM_{10} = PM_{10} (front half) + PM_{10} [$(NH_4)_2SO_4$] in HRSG only (back-half)								
a. PM_{10} (front half) (lb/hr)								
CT- provided	4.0	3.5	3.4	3.2	4.0	3.5	3.4	3.2
DB (lb/hr) - calculated	0.0	0.0	0.0	0.0	2.4	2.4	2.4	2.4
Total CT/DB emission rate (lb/hr)	4.0	3.5	3.4	3.2	6.4	5.9	5.8	5.6
b. PM_{10} [$(NH_4)_2SO_4$] from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})								
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3 /lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3								
CT SO_2 emission rate (lb/hr)- calculated	15.6	15.0	14.5	14.0	15.6	15.0	14.5	14.0
Conversion (%) from SO_2 to SO_3 in CT	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
DB SO_2 emission rate (lb/hr)- calculated	--	--	--	--	2.7	2.7	2.7	2.7
Conversion (%) from SO_2 to SO_3 in DB	--	--	--	--	20.0	20.0	20.0	20.0
Remaining SO_2 (lb/hr) after conversion - calculated	14.1	13.5	13.0	12.6	16.2	15.6	15.2	14.7
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100	100	100	100	100
MW $(NH_4)_2SO_4$/ SO_3 (132/80)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	4.09	3.92	3.79	3.66	5.32	5.15	5.02	4.89
Total HRSG stack emission rate (lb/hr) [a + b] - provided								
-calculated	8.1	7.4	7.2	6.9	11.7	11.0	10.8	10.5
- maximum	8.1	7.4	7.2	6.9	11.7	11.0	10.8	10.5
(lb/mmBtu, HHV)	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur Dioxide								
SO_2 (lb/hr)= Natural gas (scf/hr) x sulfur content(gr/100 scf) x 1 lb/7000 gr x (lb SO_2 /lb S) /100								
Fuel use (cf/hr)	2,733,204	2,621,598	2,532,313	2,443,029	3,199,356	3,087,750	2,998,466	2,909,181
Sulfur content (grains/ 100 cf)	2	2	2	2	2	2	2	2
lb SO_2 /lb S (64/32)	2	2	2	2	2	2	2	2
HRSG stack emission rate (lb/hr) - calculated	15.6	15.0	14.5	14.0	18.3	17.6	17.1	16.6
Nitrogen Oxides								
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]								
NO_x (ppmv actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]								
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr								
Basis, ppm actual- calculated	18.2	18.1	18.0	17.9	22.1	22.1	22.1	22.2
CT/DB, ppmvd @15% O_2 - provided	15	15	15	15	15.6	15.6	15.7	15.7
Moisture (%)	8.29760756	9.04185405	9.76898791	10.91	9.61	10.39	11.15	12.33
Oxygen (%)	11.9990187	11.8901928	11.7771604	11.56	10.55	10.39	10.23	9.97
Oxygen (%) dry	13.08	13.07	13.05	12.98	11.67	11.59	11.52	11.38
Turbine Flow (acfm)	3,481,669	3,382,811	3,303,538	3,223,823	3,504,027	3,404,768	3,325,831	3,245,994
Turbine Flow (acfm), dry	3,192,774	3,076,942	2,980,816	2,872,095	3,167,465	3,050,961	2,954,900	2,845,697
Turbine Exhaust Temperature (°F)	1,126	1,135	1,144	1,156	1,126	1,135	1,144	1,156
CT/DB emission rate (lb/hr) - calculated	150.9	144.8	139.9	135.0	184.2	178.1	173.1	168.2
CT/DB Emission rate (lb/hr) - provided	151.0	144.0	140.0	135.0	184.3	177.3	173.3	168.3
HRSG Stack emission rate, ppmvd @ 15% O_2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HRSG stack emission rate (lb/hr) - calculated (Max. CT/DB calculated/provided)	20.1	19.3	18.7	18.0	23.6	22.8	22.1	21.5
Carbon Monoxide								
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]								
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]								
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr								
Basis, ppm actual- calculated	4.98	4.95	4.92	4.90	8.7	8.8	8.9	9.0
Basis, ppmvd @ 15% O_2 - provided	4.10	4.10	4.10	4.10	6.1	6.2	6.3	6.4
Moisture (%)	8.30	9.04	9.77	10.91	9.61	10.39	11.15	12.33
Oxygen (%)	12.00	11.89	11.78	11.56	10.55	10.39	10.23	9.97
Oxygen (%) dry	13.08	13.07	13.05	12.98	11.67	11.59	11.52	11.38
Turbine Flow (acfm)	3,481,669	3,382,811	3,303,538	3,223,823	3,504,027	3,404,768	3,325,831	3,245,994
Turbine Flow (acfm), dry	3,192,774	3,076,942	2,980,816	2,872,095	3,167,465	3,050,961	2,954,900	2,845,697
Turbine Exhaust Temperature (°F)	1,126	1,135	1,144	1,156	1,126	1,135	1,144	1,156
CT/DB emission rate (lb/hr) - calculated	25.1	24.1	23.3	22.5	44.1	43.1	42.3	41.5
CT/DB Emission rate (lb/hr) - provided	25.0	24.0	24.0	23.0	44.0	43.0	43.0	42.0
HRSG Stack emission rate, ppmvd @ 15% O_2 - provided	4.1	4.1	4.1	4.1	7.6	7.6	7.6	7.6
HRSG Stack emission rate (lb/hr)- calculated (Max. CT/DB calculated/provided)	25.1	24.1	24.0	23.0	54.5	52.7	52.0	50.3
Volatile Organic Compounds								
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]								
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]								
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr								
Basis, ppm actual- calculated	1.21	1.21	1.20	1.20	2.0	2.0	2.1	2.1
Basis, ppmvd @ 15% O_2 - provided	1.00	1.00	1.00	1.00	1.4	1.4	1.5	1.5
Moisture (%)	8.30	9.04	9.77	10.91	9.61	10.39	11.15	12.33
Oxygen (%) wet	12.00	11.89	11.78	11.56	10.55	10.39	10.23	9.97
Oxygen (%) dry	13.08	13.07	13.05	12.98	11.67	11.59	11.52	11.38
Turbine Flow (acfm)	3,481,669	3,382,811	3,303,538	3,223,823	3,504,027	3,404,768	3,325,831	3,245,994
Turbine Flow (acfm), dry	3,192,774	3,076,942	2,980,816	2,872,095	3,167,465	3,050,961	2,954,900	2,845,697
Turbine Exhaust Temperature (°F)	1,126	1,135	1,144	1,156	1,126	1,135	1,144	1,156
CT/DB emission rate (lb/hr) - calculated	3.50	3.36	3.24	3.13	5.87	5.73	5.62	5.51
CT/DB Emission rate (lb/hr) - provided	3.50	3.40	3.30	3.20	5.88	5.78	5.68	5.58
HRSG Stack emission rate, ppmvd @ 15% O_2 - provided	1.2	1.2	1.2	1.2	1.6	1.6	1.6	1.6
HRSG Stack emission rate (lb/hr)- calculated (Max. CT/DB calculated/provided)	4.2	4.08	4.0	3.8	6.6	6.4	6.2	6.0
Sulfuric Acid Mist								
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100								
CT SO_2 emission rate (lb/hr) - calculated	15.6	15.0	14.5	14.0	15.6	15.0	14.5	14.0
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0	2.7	2.7	2.7	2.7
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20	20	20	20	20
SCR SO_2 (lb/hr)(remaining SO_2 after conversion) - calc	14.1	13.5	13.0	12.6	16.2	15.6	15.2	14.7
SCR Conversion to H_2SO_4 (% by weight) - provided	3	3	3	3	3	3	3	3
HRSG Stack emission rate (lb/hr)	3.04	2.91	2.81	2.71	3.95	3.83	3.73	3.63
Lead								
Lead (lb/hr) = NA								
Emission Rate Basis	NA	NA	NA	NA	NA	NA	NA	NA
Emission rate (lb/hr)	NA	NA	NA	NA	NA	NA	NA	NA

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-3-501G CLASS
DESIGN INFORMATION AND STACK PARAMETERS
FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, 75% LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Combustion Turbine Performance				
Heat Input (MMBtu/hr, LHV)	1,935	1,844	1,781	1,705
(MMBtu/hr, HHV)	2,148	2,047	1,977	1,892
Relative Humidity (%)	60	60	60	50
Fuel heating value (Btu/lb, LHV)	20,909	20,909	20,909	20,909
(Btu/lb, HHV)	23,209	23,209	23,209	23,209
(HHV/LHV)	1.110	1.110	1.110	1.110
CT Exhaust Flow				
Mass flow (lb/hr)- provided	4,161,800	4,012,700	3,895,000	3,752,000
- provided	NA	NA	NA	NA
Temperature (°F) - provided	1,099	1,116	1,127	1,143
Moisture (% Vol.)	7.91	8.39	9.06	9.96
Oxygen (% Vol.)	12.44	12.44	12.38	12.23
Molecular Weight	28.44	28.39	28.38	28.20
Volume flow (acfm) - calculated	2,781,574	2,715,558	2,655,238	2,600,400
Fuel Usage				
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]				
Heat input (MMBtu/hr, LHV)	1,935	1,844	1,781	1,705
Heat content (Btu/lb, LHV)	20,909	20,909	20,909	20,909
Fuel usage (lb/hr)- provided	92,570	88,180	85,200	81,510
- calculated	92,550	88,177	85,182	81,520
Heat content (Btu/cf, LHV)- assumed	918	918	918	918
Fuel density (lb/ft^3)	0.0439	0.0439	0.0439	0.0439
Fuel usage (cf/hr)- calculated	2,108,439	2,008,449	1,940,575	1,856,529
HRSG Stack				
HRSG - Stack Height (feet)	149	149	149	149
Diameter (feet)	22	22	22	22
HRSG Stack Flow Conditions				
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)² /4) x 3.14159] / 60 sec/min				
Mass flow (lb/hr)	4,161,800	4,012,700	3,895,000	3,752,000
HRSG Stack Temperature (°F)	184	185	186	187
Molecular weight	28.44	28.39	28.38	28.20
Volume flow (acfm)	1,149,027	1,111,733	1,080,834	1,049,569
Diameter (feet)	22	22	22	22
Velocity (ft/sec)- calculated	50.4	48.7	47.4	46.0

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft² (@14.67 psia).
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-4-501G CLASS
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, 75% LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Particulate from CT and HRSG				
Total PM_{10} = PM_{10} (front half) + PM_{10} [$(NH_4)_2SO_4$] in HRSG only (back-half)				
a. PM_{10} (front half) (lb/hr)				
Particulate from CT- provided	3.0	3.0	3.0	3.0
b. PM_{10} [$(NH_4)_2SO_4$] from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})				
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3/lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3				
SO_2 emission rate (lb/hr)- calculated	12.0	11.5	11.1	10.6
Conversion (%) from SO_2 to SO_3	10.0	10.0	10.0	10.0
Remaining SO_2 (lb/hr) in CT after conversion - calculated	10.8	10.3	10.0	9.5
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100
MW $(NH_4)_2$ SO_4/ SO_3 (132/80)	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	3.16	3.01	2.90	2.78
Total HRSG stack emission rate (lb/hr) [a + b] - provided				
-calculated	6.2	6.0	5.9	5.8
- maximum	6.2	6.0	5.9	5.8
(lb/mmBtu, HHV)	NA	NA	NA	NA
Sulfur Dioxide				
SO_2 (lb/hr)= Natural gas (scf/hr) x sulfur content(gr/100 scf) x 1 lb/7000 gr x (lb SO_2 /lb S) /100				
Fuel use (cf/hr)	2,108,439	2,008,449	1,940,575	1,856,529
Sulfur content (grains/ 100 cf)	2	2	2	2
lb SO_2 /lb S (64/32)	2	2	2	2
HRSG Stack emission rate (lb/hr)- calculated	12.0	11.5	11.1	10.6
Nitrogen Oxides				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
NO_x (ppm actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	17.3	17.1	16.8	16.7
CT / DB, ppmvd @15% O_2 - provided	15	15	15	15
Moisture (%)	7.908796321	8.389799533	9.059407947	9.955184131
Oxygen (%)	12.44	12.44	12.38	12.23
Oxygen (%) dry	13.51	13.58	13.62	13.58
Turbine Flow (acfm)	2,781,574	2,715,558	2,655,238	2,600,400
Turbine Flow (acfm), dry	2,561,585	2,487,728	2,414,689	2,341,526
Turbine Exhaust Temperature (°F)	1,099	1,116	1,127	1,143
CT Emission rate (lb/hr) - calculated	116.4	110.9	106.3	102.5
CT Emission rate (lb/hr) - provided	116.0	111.0	107.0	103.0
HRSG Stack emission rate, ppmvd @ 15% O_2	2.0	2.0	2.0	2.0
HRSG Stack emission rate (lb/hr) - calculated (Max. CT/DB calculated/provided)	15.5	14.8	14.3	13.7
Carbon Monoxide				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	11.5	11.4	11.2	11.2
Basis, ppmvd @ 15% O_2 - provided	10	10	10	10
Moisture (%)	7.91	8.39	9.06	9.96
Oxygen (%)	12.44	12.44	12.38	12.23
Oxygen (%) dry	13.51	13.58	13.62	13.58
Turbine Flow (acfm)	2,781,574	2,715,558	2,655,238	2,600,400
Turbine Flow (acfm), dry	2,561,585	2,487,728	2,414,689	2,341,526
Turbine Exhaust Temperature (°F)	1,099	1,116	1,127	1,143
HRSG Exhaust Temperature (°F)	184	185	186	187
CT Emission rate (lb/hr) - calculated	47.3	45.0	43.1	41.6
CT Emission rate (lb/hr) - provided	48.0	45.5	44.0	42.0
HRSG Stack emission rate, ppmvd @ 15% O_2	10	10	10	10
HRSG Stack emission rate (lb/hr)- calculated (Max. CT/DB calculated/provided)	48.0	45.5	44.0	42.0
Volatile Organic Compounds				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppmvd - calculated	1.15	1.14	1.12	1.12
Basis, ppmvd @ 15% O_2 - provided	1	1	1	1
Moisture (%)	7.908796321	8.389799533	9.059407947	9.955184131
Oxygen (%)	12.44	12.44	12.38	12.23
Oxygen (%) dry	13.51	13.58	13.62	13.58
Turbine Flow (acfm)	2,781,574	2,715,558	2,655,238	2,600,400
Turbine Flow (acfm), dry	2,561,585	2,487,728	2,414,689	2,341,526
Turbine Exhaust Temperature (°F)	1,099	1,116	1,127	1,143
HRSG Exhaust Temperature (°F)	184	184	184	184
CT Emission rate (lb/hr) - calculated	2.70	2.57	2.46	2.38
CT Emission rate (lb/hr) - provided	2.70	2.60	2.50	2.40
HRSG Stack emission rate, ppmvd @ 15% O_2	1.2	1.2	1.2	1.2
HRSG Stack emission rate (lb/hr)- calculated (Max. CT/DB calculated/provided)	3.2	3.1	3.0	2.9
Sulfuric Acid Mist				
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100				
CT SO_2 emission rate (lb/hr) - calculated	12.0	11.5	11.1	10.6
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20
SCR SO_2 emission rate (lb/hr) - calculated (remaining SO_2 after conversion)	10.8	10.3	10.0	9.5
HRSG Stack emission rate (lb/hr)- calculated	2.34	2.23	2.16	2.06
- provided	1.9	1.6	1.6	1.5
Lead				
Lead (lb/hr) = NA				
Emission Rate Basis	NA	NA	NA	NA
HRSG Stack emission rate (lb/hr)	NA	NA	NA	NA

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-5-501G CLASS
DESIGN INFORMATION AND STACK PARAMETERS
FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, BASE LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Combustion Turbine Performance				
Heat Input (MMBtu/hr, LHV)	2,326	2,187	2,097	1,986
(MMBtu/hr, HHV)	2,466	2,318	2,223	2,105
Relative Humidity (%)	60	60	60	50
Fuel heating value (Btu/lb, LHV)	18,387	18,387	18,387	18,387
(Btu/lb, HHV)	19,490	19,490	19,490	19,490
(HHV/LHV)	1.060	1.060	1.060	1.060
CT Exhaust Flow				
Mass Flow (lb/hr)- provided	5,200,800	4,948,500	4,770,500	4,546,000
Temperature (°F) - provided	993	1,005	1,016	1,031
Moisture (% Vol.)	7.48	7.95	8.61	9.52
Oxygen (% Vol.)	12.52	12.51	12.43	12.31
Molecular Weight	28.66	28.60	28.52	28.41
Volume flow (acfm) - calculated	3,214,789	3,090,567	3,010,188	2,908,900
Fuel Usage				
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]				
Heat input (MMBtu/hr, LHV)	2,326	2,187	2,097	1,986
Heat content (Btu/lb, LHV)	18,387	18,387	18,387	18,387
Fuel usage (lb/hr)- provided	126,530	118,950	114,050	108,030
- calculated	126,502	118,943	114,048	108,011
HRSG Stack				
HRSG - Stack Height (feet)	149	149	149	149
Diameter (feet)	22	22	22	22
HRSG Stack Flow Conditions				
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)² /4) x 3.14159] / 60 sec/min				
Mass flow (lb/hr) - provided	5,200,800	4,948,500	4,770,500	4,546,000
HRSG Stack Temperature (°F)	359	357	355	354
Molecular weight	28.66	28.60	28.52	28.41
Volume flow (acfm)	1,812,053	1,723,545	1,662,130	1,588,092
Diameter (feet)	22	22	22	22
Velocity (ft/sec)- calculated	79.4	75.6	72.9	69.6

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft² (@14.67 psia).
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-6-501G CLASS
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, BASE LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Particulate from CTand SCR				
Total PM_{10} = PM_{10} (front half) + PM_{10} $[(NH_4)_2SO_4]$ in HRSG only (back-half)				
a. PM_{10} (front half) (lb/hr)				
Particulate from CT- provided	37.8	35.8	34.4	32.6
b. PM_{10} $((NH_4)_2SO_4)$ from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})				
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3 /lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3				
SO_2 emission rate (lb/hr)- calculated	3.8	3.6	3.4	3.2
Conversion (%) from SO_2 to SO_3	10.0	10.0	10.0	10.0
Remaining SO_2 (lb/hr) in CT after conversion - calculated	3.4	3.2	3.1	2.9
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100
MW $(NH_4)_2$ SO_4/ SO_3 (132/80)	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	0.99	0.93	0.90	0.85
Total HRSG stack emission rate (lb/hr) [a + b] - provided	38.4	36.3	34.9	33.1
-calculated	38.8	36.7	35.3	33.4
- maximum	38.8	36.7	35.3	33.4
(lb/mmBtu, HHV)	NA	NA	NA	NA
Sulfur Dioxide				
SO_2 (lb/hr)= Fuel oil (lb/hr) x sulfur content(% weight) x (lb SO_2 /lb S) /100				
Fuel oil Sulfur Content	0.0015%	0.0015%	0.0015%	0.0015%
Fuel oil use (lb/hr)	126,530	118,950	114,050	108,030
lb SO_2 / lb S (64/32)	2	2	2	2
HRSG Stack emission rate (lb/hr)- calculated	3.8	3.6	3.4	3.2
Nitrogen Oxides				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
NO_x (ppm actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	48.5	47.9	47.5	47.0
CT/DB, ppmvd @15% O_2	42	42	42	42
Moisture (%)	7.476823302	7.953290253	8.611751593	9.524698683
Oxygen (%)	12.52	12.51	12.43	12.31
Oxygen (%) dry	13.53	13.59	13.61	13.60
Turbine Flow (acfm)	3,214,789	3,090,567	3,010,188	2,908,900
Turbine Flow (acfm), dry	2,974,425	2,844,765	2,750,958	2,631,836
Turbine Exhaust Temperature (°F)	993	1,005	1,016	1,031
CT Emission rate (lb/hr) - calculated	405.0	381.0	365.2	346.0
CT emission rate (lb/hr) - provided	404.0	379.0	364.0	345.0
HRSG Stack emission rate, ppmvd @ 15% O_2 - provided	8	8	8.0	8.0
HRSG Stack emission rate (lb/hr) - calculated	77.1	72.6	69.6	65.9
(Max. CT/DB calculated/provided)				
Carbon Monoxide				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	9.2	9.1	9.0	9.0
Basis, ppmvd @ 15% O_2 - provided	8	8	8	8
Moisture (%)	7.476823302	7.953290253	8.611751593	9.524698683
Oxygen (%)	12.52	12.51	12.43	12.31
Oxygen (%) dry	13.53	13.59	13.61	13.60
Turbine Flow (acfm)	3,214,789	3,090,567	3,010,188	2,908,900
Turbine Flow (acfm), dry	2,974,425	2,844,765	2,750,958	2,631,836
Turbine Exhaust Temperature (°F)	993	1,005	1,016	1,031
HRSG Exhaust Temperature (°F)	359	357	355	354
CT Emission rate (lb/hr) - calculated	47.0	44.2	42.3	40.1
CT emission rate (lb/hr) - provided	47.0	44.0	43.0	40.0
HRSG Stack emission rate, ppmvd @ 15% O_2	8.0	8.0	8.0	8.0
HRSG Stack emission rate (lb/hr) - calculated	47.0	44.2	43.0	40.1
(Max. CT/DB calculated/provided)				
Volatile Organic Compounds				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	6.9	6.8	6.8	6.7
Basis, ppmvd @ 15% O_2 - provided	6.0	6.0	6.0	6.0
Moisture (%)	7.48	7.95	8.61	9.52
Oxygen (%)	12.52	12.51	12.43	12.31
Oxygen (%-dry)	13.53	13.59	13.61	13.60
Turbine Flow (acfm)	3,214,789	3,090,567	3,010,188	2,908,900
Turbine Flow (acfm), dry	2,974,425	2,844,765	2,750,958	2,631,836
Turbine Exhaust Temperature (°F)	993	1,005	1,016	1,031
CT Emission rate (lb/hr) - calculated	20.1	18.9	18.1	17.2
CT emission rate (lb/hr) - provided	20.1	18.9	18.1	17.2
HRSG Stack emission rate, ppmvd @ 15% O_2	6.0	6.0	6.0	6.0
HRSG Stack emission rate (lb/hr) - calculated	20.1	18.9	18.1	17.2
(Max. CT/DB calculated/provided)				
Sulfuric Acid Mist				
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100				
CT SO_2 emission rate (lb/hr) - calculated	3.8	3.6	3.4	3.2
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20
SCR SO_2 emission rate (lb/hr) - calculated (remaining SO_2 after conversion)	3.4	3.2	3.1	2.9
SCR Conversion to H_2SO_4 (% by weight) - provided	3	3	3	3
HRSG Stack emission rate (lb/hr)- calculated	0.74	0.69	0.67	0.63
- provided	1.2	1.1	1.0	1.0
Lead				
Lead (lb/hr) = Basis (lb/10^{12} Btu) x Heat Input (MMBtu/hr) / 1,000,000 MMBtu/10^{12} Btu				
Emission Rate Basis (lb/10^{12} Btu)	14	14	14	14
HRSG Stack emission rate (lb/hr)- calculated	0.0326	0.0306	0.0294	0.0278

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-7-501G CLASS
DESIGN INFORMATION AND STACK PARAMETERS
FOR THE WEST COUNTY ENERGY CENTER UNIT 3 PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, 75% LOAD

Parameter	Turbine Inlet Temperature			
	35 °F	59 °F	75 °F	95 °F
Combustion Turbine Performance				
Heat Input (MMBtu/hr, LHV)	1,815	1,721	1,660	1,585
(MMBtu/hr, HHV)	1,924	1,824	1,760	1,680
Relative Humidity (%)	60	60	60	50
Fuel heating value (Btu/lb, LHV)	18,387	18,387	18,387	18,387
(Btu/lb, HHV)	19,490	19,490	19,490	19,490
(HHV/LHV)	1.060	1.060	1.060	1.060
CT Exhaust Flow				
Mass Flow (lb/hr)- with no margin	5,031,800	4,841,700	4,703,300	4,511,000
- provided	NA	NA	NA	NA
Temperature (°F) - provided	840	854	866	885
Moisture (% Vol.)	6.12	6.62	7.28	8.20
Oxygen (% Vol.)	14.13	14.12	14.04	13.87
Molecular Weight	28.71	28.65	28.57	28.46
Volume flow (acfm) - calculated	2,777,963	2,707,457	2,661,515	2,599,281
Fuel Usage				
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]				
Heat input (MMBtu/hr, LHV)	1,815	1,721	1,660	1,585
Heat content (Btu/lb, LHV)	18,387	18,387	18,387	18,387
Fuel usage (lb/hr)- calculated	98,710	93,950	90,270	86,180
	98,711	93,599	90,281	86,202
HRSG Stack				
HRSG - Stack Height (feet)	149	149	149	149
Diameter (feet)	22	22	22	22
HRSG Stack Flow Conditions				
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)^2 /4) x 3.14159] / 60 sec/min				
Mass flow (lb/hr)	5,031,800	4,841,700	4,703,300	4,511,000
HRSG Stack Temperature (°F)	350	348	346	345
Molecular weight	28.71	28.65	28.57	28.46
Volume flow (acfm)	1,730,885	1,664,859	1,617,784	1,555,703
Diameter (feet)	22	22	22	22
Velocity (ft/sec)- calculated	75.9	73.0	70.9	68.2

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft^2 (@14.67 psia).
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-8-501G CLASS
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, 75% LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Particulate from CTand SCR				
Total PM_{10} = PM_{10} (front half) + PM_{10} $[(NH_4)_2SO_4]$ in HRSG only (back-half)				
a. PM_{10} (front half) (lb/hr)				
Particulate from CT- provided	36.9	35.4	34.2	32.6
b. PM_{10} $[(NH_4)_2SO_4]$ from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})				
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3 /lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3				
SO_2 emission rate (lb/hr)- calculated	3.0	2.8	2.7	2.6
Conversion (%) from SO_2 to SO_3 in CT	10.0	10.0	10.0	10.0
Remaining SO_2 (lb/hr) in CT after conversion - calculated	2.7	2.5	2.4	2.3
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100
MW $(NH_4)_2$ SO_4/ SO_3 (132/80)	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	0.78	0.74	0.71	0.68
Total HRSG stack emission rate (lb/hr) [a + b] - provided	37.4	35.9	34.7	33
-calculated	37.7	36.1	34.9	33.3
- maximum	37.7	36.1	34.9	33.3
(lb/mmBtu, HHV)	NA	NA	NA	NA
Sulfur Dioxide				
SO_2 (lb/hr)= Fuel oil (lb/hr) x sulfur content(% weight) x (lb SO_2 /lb S) /100				
Fuel oil Sulfur Content	0.0015%	0.0015%	0.0015%	0.0015%
Fuel oil use (lb/hr)	98,710	93,950	90,270	86,180
lb SO_2 / lb S (64/32)	2	2	2	2
HRSG Stack emission rate (lb/hr)- calculated	3.0	2.8	2.7	2.6
Nitrogen Oxides				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
NO_x (ppm actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	39.1	38.4	38.0	37.8
CT/DB, ppmvd @15% O_2	42	42	42	42
Moisture (%)	6.119380948	6.615474963	7.278904126	8.198706257
Oxygen (%)	14.13	14.12	14.04	13.87
Oxygen (%) dry	15.05	15.12	15.14	15.11
Turbine Flow (acfm)	2,777,963	2,707,457	2,661,515	2,599,281
Turbine Flow (acfm), dry	2,607,969	2,528,346	2,467,786	2,386,173
Turbine Exhaust Temperature (°F)	840	854	866	885
CT emission rate (lb/hr)	315.1	298.7	288.0	275.7
CT emission rate (lb/hr)(provided)	315.0	299.0	288.0	275.0
HRSG Stack, ppmvd @ 15% O_2 - provided	8.0	8.0	8.0	8.0
HRSG Stack emission rate (lb/hr)- calculated	60.0	57.0	54.9	52.5
(Max. CT/DB calculated/provided)				
Carbon Monoxide				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	46.5	45.7	45.3	45.0
Basis, ppmvd @ 15% O_2 - provided	50	50	50	50
Moisture (%)	6.119380948	6.615474963	7.278904126	8.198706257
Oxygen (%)	14.13	14.12	14.04	13.87
Oxygen (%) dry	15.05	15.12	15.14	15.11
Turbine Flow (acfm)	2,777,963	2,707,457	2,661,515	2,599,281
Turbine Flow (acfm), dry	2,607,969	2,528,346	2,467,786	2,386,173
Turbine Exhaust Temperature (°F)	840	854	866	885
HRSG Exhaust Temperature (°F)	350	348	346	345
CT emission rate (lb/hr)	228.3	216.5	208.7	199.8
CT emission rate (lb/hr)(provided)	228.0	217.0	209.0	200.0
HRSG Stack, ppmvd @ 15% O_2 - provided	50.0	50.0	50.0	50.0
HRSG Stack emission rate (lb/hr)- calculated	228.3	217.0	209.0	200.0
(Max. CT/DB calculated/provided)				
Volatile Organic Compounds				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	9.3	9.1	9.1	9.0
Basis, ppmvd @ 15% O_2 - provided	10.0	10.0	10.0	10.0
Moisture (%)	6.12	6.62	7.28	8.20
Oxygen (%)	14.13	14.12	14.04	13.87
Oxygen (%) dry	15.05	15.12	15.14	15.11
Turbine Flow (acfm)	2,777,963	2,707,457	2,661,515	2,599,281
Turbine Flow (acfm), dry	2,607,969	2,528,346	2,467,786	2,386,173
Turbine Exhaust Temperature (°F)	840	854	866	885
HRSG Exhaust Temperature (°F)	350	348	346	345
CT emission rate (lb/hr) (calculated)	26.1	24.7	23.9	22.8
CT emission rate (lb/hr)(provided)	26.1	24.8	23.9	22.8
HRSG Stack, ppmvd @ 15% O_2 - provided	10.0	10.0	10.0	10.0
HRSG Stack emission rate (lb/hr)- calculated	26.10	24.80	23.90	22.83
(Max. CT/DB calculated/provided)				
Sulfuric Acid Mist				
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100				
CT SO_2 emission rate (lb/hr) - provided	3.0	2.8	2.7	2.6
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20
SCR SO_2 emission rate (lb/hr) - calculated (remaining SO_2 after conversion	2.7	2.5	2.4	2.3
SCR Conversion to H_2SO_4 (% by weight) - provided	3	3	3	3
HRSG Stack emission rate (lb/hr)- calculated	0.58	0.55	0.53	0.50
Lead				
Lead (lb/hr) = Basis (lb/10^{12} Btu) x Heat Input (MMBtu/hr) / 1,000,000 MMBtu/10^{12} Btu				
Emission Rate Basis (lb/10^{12} Btu)	14	14	14	14
HRSG Stack emission rate (lb/hr)- calculated	0.0254	0.0241	0.0232	0.0222

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: MPS, 2008; CT Performance Data; Golder, 2008.

TABLE A-9-501G CLASS
REGULATED AND HAZARDOUS AIR POLLUTANT EMISSION FACTORS AND EMISSIONS
FOR THE CONVERSION PROJECT
WHEN FIRING NATURAL GAS, MPS 501G CLASS CT

Parameter	Emission Rate (lb/hr) firing Natural Gas for Operating Conditions of Base Load (1)		Natural Gas Maximum Annual Gas	
Ambient Temperature (°F):	59 °F	59 °F w/DB	Compressors	59 °F
HIR (MMBtu/hr):	2,671	3,146	1 CT/HRSG	3 CTs/HRSGs
Sulfuric acid mist	2.10	3.83	11.7	35.1
HAPs [Section 112(b) of Clean Air Act]				
1,3-Butadiene	0.001149	0.001353	0.005	0.016
Acetaldehyde	0.1068	0.1258	0.495	1.486
Acrolein	0.0171	0.0201	0.079	0.238
Benzene	0.0321	0.0378	0.149	0.446
Ethylbenzene	0.0855	0.1007	0.396	1.189
Formadehyde	0.573	0.676	2.658	7.973
Naphthalene	0.00347	0.00409	0.016	0.048
Polycyclic Aromatic Hydrocarbons (PAH) (3)	0.00588	0.00692	0.027	0.082
Propylene Oxide	0.0775	0.0912	0.359	1.077
Toluene	0.0881	0.1038	0.409	1.226
Xylene	0.171	0.201	0.793	2.378
Antimony	0.0	0.0	0.0	0.00
Arsenic	0.0	0.0	0.0	0.00
Beryllium	0.0	0.0	0.0	0.00
Cadmium	0.0	0.0	0.0	0.00
Chromium	0.0	0.0	0.0	0.00
Lead	0.0	0.0	0.0	0.00
Manganese	0.0	0.0	0.0	0.00
Mercury	0.0	0.0	0.0	3.71E-05
Nickel	0.0	0.0	0.0	0.00
Selenium	0.0	0.0	0.0	0.00
HAPs (Total)	1.162	1.369	5.39	16.2

(1) Emissions based on the following emission factors and conversion factors for firing natural gas:

Emission Factors		Value	Reference
Sulfuric acid mist		10	%; Conversion of SO_2 to SO_3 in gas turbine
1,3-Butadiene	(a)	0.43	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Acetaldehyde		40	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Acrolein		6.4	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Benzene		12	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Ethylbenzene		32	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Formadehyde		0.091	ppmvd @15% O_2 (see Table 9a)
Naphthalene		1.3	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Polycyclic Aromatic Hydrocarbons (PAH)		2.2	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Propylene Oxide	(a)	29	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Toluene		33	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000. Database
Xylene		64	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000

Antimony	0.00E+00
Arsenic	0.00E+00
Beryllium	0.00E+00
Cadmium	0.00E+00
Chromium	0.00E+00
Lead	0.00E+00
Manganese	0.00E+00
Mercury	1.00E-03
Nickel	0.00E+00
Selenium	0.00E+00

(a) Based on 1/2 the detection limit; expected emissions are lower.

(2) Annual emissions based on ambient temperature of 59°F firing natural gas for following hours:

5880 CT
2880 CT/DB

(3) Assumed to be representative of Polycyclic Organic Matter (POM) emissions, a regulated HAP.

TABLE A-9a-501G CLASS
MAXIMUM FORMALDEHYDE EMISSIONS
FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

Parameter	CT Only Turbine Inlet Temperature			
	35 °F	59 °F	59 °F w/DB	95 °F
	0			
Formaldehyde (CH_2O) MW = 30				Gas Compressors
CH_2O (lb/hr) = CH_2O (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2116.8 lb/ft^2 (pressure) / [1545.7 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
CH_2O (ppm actual) = CH_2O (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x (1- Moisture(%)/100)				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
Basis, ppm actual- calculated	0.111	0.110	0.129	0.109
CT, ppmvd @15% O_2	0.091	0.091	0.091	0.091
Moisture (%)	8.297607563	9.041854047	10.39	10.91027168
Oxygen (%)	12.00	11.89	10.39	11.56
Oxygen (%) dry	13.08	13.07	11.59	12.98
Exhaust Flow (acfm)	1,440,085	1,388,967	1,375,782	1,307,085
Exhaust Temperature (°F)	196	195	185	195
CT Emission rate (lb/hr)	0.597	0.573	0.676	0.534
CT Emission rate (lb/10^{12} Btu) (HHV)	214.4	214.6	252.9	214.6

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: MPS, 2005; CT Performance Data; Golder, 2008.

TABLE A-10-501G CLASS
REGULATED AND HAZARDOUS AIR POLLUTANT EMISSION FACTORS AND EMISSIONS
FOR THE CONVERSION PROJECT
WHEN FIRING DISTILLATE FUEL OIL, MPS 501G CLASS CT

Parameter	Emission Rate (lb/hr) Distillate Fuel Oil (1)	Maximum Annual Emissions (TPY)			Emission Rate (lb/hr) Natural Gas (4)		Maximum Annual Emissions (TPY)		
	Base Load	Gas			Base Load		Natural Gas and Fuel Oil (5)		
Ambient Temperature (°F):	59 °F	Compressors							
HIR (MMBtu/hr):	2,318	3 CT/HRSGs (500 hrs on oil)	3 CT/HRSGs (1,000 hrs on oil)	3 CT/HRSGs (1,500 hrs on oil)	1 CT/HRSGs (CT Only)	1 CT/HRSGs (CT + DB)	3 CT/HRSGs (500 hrs on oil)	3 CT/HRSGs (1,000 hrs on oil)	3 CT/HRSGs (1,500 hrs on oil)
Sulfuric acid mist	0.69	0.52	1.04	1.56	2.10	3.83	34.0	32.9	31.9
HAPs [Section 112(b) of Clean Air Act]									
1,3-Butadiene	0.0371	0.028	0.056	0.083	0.001	0.001	0.043	0.070	0.097
Acetaldehyde	0.00	0.00	0.00	0.00	0.107	0.126	1.406	1.326	1.246
Acrolein	0.00	0.00	0.00	0.00	0.017	0.020	0.225	0.212	0.199
Benzene	0.128	0.096	0.191	0.287	0.032	0.038	0.517	0.589	0.661
Ethylbenzene	0.00	0.00	0.00	0.00	0.085	0.101	1.125	1.061	0.996
Formadehyde	0.538	0.404	0.808	1.211	0.573	0.676	7.947	7.921	7.895
Naphthalene	0.0811	0.061	0.122	0.183	0.003	0.004	0.107	0.165	0.223
Polycyclic Aromatic Hydrocarbons (PAH) (3)	0.0927	0.070	0.139	0.209	0.006	0.007	0.147	0.212	0.277
Propylene Oxide	0.00	0.00	0.00	0.00	0.077	0.091	1.019	0.961	0.903
Toluene	0.00	0.00	0.00	0.00	0.088	0.104	1.160	1.094	1.028
Xylene	0.00	0.00	0.00	0.00	0.171	0.201	2.249	2.121	1.993
Antimony	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	0.0255	0.019	0.038	0.057	0.00	0.00	0.019	0.038	0.057
Beryllium	0.000719	0.0005	0.001	0.002	0.00	0.00	0.00	0.00	0.00
Cadmium	0.01113	0.0083	0.017	0.025	0.00	0.00	0.008	0.017	0.025
Chromium	0.0255	0.019	0.038	0.057	0.00	0.00	0.019	0.038	0.057
Lead	0.0325	0.024	0.049	0.073	0.00	0.00	0.024	0.049	0.073
Manganese	1.83	1.374	2.747	4.121	0.00	0.00	1.37	2.75	4.12
Mercury	0.00278	0.0021	0.004	0.006	0.00	0.00	0.00	0.00	0.01
Nickel	0.01066	0.0080	0.016	0.024	0.00	0.00	0.008	0.016	0.024
Selenium	0.0580	0.043	0.087	0.130	0.00	0.00	0.043	0.087	0.130
HAPs (Total)	2.87	2.16	4.31	6.47	1.2	1.4	17.4	18.7	20.0

(1) Emissions based on the following emission factors and conversion factors for firing distillate fuel oil:

Emission Factors		Value	Reference
Sulfuric acid mist		5	%; Conversion of SO_2 to SO_3 in gas turbine
1,3-Butadiene	(a)	16	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Acetaldehyde		0.0	
Acrolein		0.0	
Benzene		55	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Ethylbenzene		0.0	
Formadehyde		0.091	ppmvd @15% O2 (see Table 10a)
Naphthalene		35	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Polycyclic Aromatic Hydrocarbons (PAH)		40	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Propylene Oxide		0.0	
Toluene		0.0	
Xylene		0.0	
Antimony		0.0	
Arsenic	(a)	11	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Beryllium	(a)	0.31	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Cadmium		4.8	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Chromium		11	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Lead		14	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Manganese		790	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Mercury		1.2	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Nickel	(a)	4.6	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Selenium	(a)	25	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000

(a) Based on 1/2 the detection limit; expected emissions are lower.

(2) Annual emissions based on ambient temperature of 59 °F and firing fuel oil at base load for : 500 hours 1,000 hours 1,500 hours

(3) Assumed to be representative of Polycyclic Organic Matter (POM) emissions, a regulated HAP.

(4) Natural gas firing emission rates based on Table A-9.

(5) Maximum total annual emissions based on the following combination of operating hours:

Oil firing at base load for :	500 hours	1,000 hours	1,500 hours
Natural gas at base load for :	5,380 hours	4,880 hours	4,380 hours
Natural gas with duct firing at base load for :	2,880 hours	2,880 hours	2,880 hours

TABLE A-10a-501G CLASS
MAXIMUM FORMALDEHYDE EMISSIONS
FOR THE CONVERSION PROJECT
MPS 501G CLASS CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, BASE LOAD

Parameter	CT Only Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Formaldehyde (CH_2O) MW = 30				Gas Compressors
CH_2O (lb/hr) = CH_2O (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2116.8 lb/ft^2 (pressure) / [1545.7 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
CH_2O (ppm actual) = CH_2O (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
Basis, ppmvw - calculated	0.105	0.104	0.103	0.102
CT, ppmvd @15% O_2	0.091	0.091	0.091	0.091
Moisture (%)	7.48	7.95	8.61175159	9.52469868
Oxygen (%)	12.52	12.51	12.43	12.31
Oxygen (%) dry	13.53	13.59	13.61	13.60
Exhaust Flow (acfm)	1,812,053	1,723,545	1,662,130	1,588,092
Exhaust Temperature (°F)	359	357	355	354
CT Emission rate (lb/hr)	0.572	0.538	0.516	0.489
CT Emission rate (lb/10^{12} Btu) (HHV)	232.1	232.2	232.1	232.3

Note: ppmvd= parts per million, volume dry; O_2= oxygen.

Source: MPS, 2007; CT Performance Data; Golder, 2007.

TABLE A-1-SH
DESIGN INFORMATION AND STACK PARAMETERS FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

	CT Only Turbine Inlet Temperature				CT with Duct Burner Turbine Inlet Temperature			
Parameter	**35 °F**	**59 °F**	**75 °F**	**95 °F**	**35 °F w/DB**	**59 °F w/DB**	**75 °F w/DB**	**95 °F w/DB**
Combustion Turbine Performance								
Heat Input (MMBtu/hr, LHV)	2,421	2,320	2,230	2,137	2,421	2,320	2,230	2,137
(MMBtu/hr, HHV)	2,689	2,577	2,477	2,374	2,689	2,577	2,477	2,374
Evaporative Cooler	Off	On	On	On	Off	On	On	On
Relative Humidity (%)	60	60	60	50	60	60	60	50
Fuel heating value (Btu/lb, LHV)	21,511	21,511	21,511	21,511	21,511	21,511	21,511	21,511
(Btu/lb, HHV)	23,893	23,893	23,893	23,893	23,893	23,893	23,893	23,893
(HHV/LHV)	1.111	1.111	1.111	1.111	1.111	1.111	1.111	1.111
Steam Flow (lb/hr)	NA	NA	NA	NA	NA	NA	NA	NA
Duct Burner (DB)								
Heat input (MMBtu/hr, HHV)	0	0	0	0	475	475	475	475
(MMBtu/hr, LHV)	0	0	0	0	427.6	427.6	427.6	427.6
CT/DB Exhaust Flow								
Mass Flow (lb/hr)- provided	4,969,000	4,769,000	4,595,000	4,403,000	4,989,629.2	4,789,629	4,615,629	4,423,630
Temperature (°F) - provided	1120.8	1138.7	1151.4	1168.0	1,121	1,139	1,151	1,168
Moisture (% Vol.)	8.36	9.14	9.88	11.03	9.70	10.52	11.31	12.50
Oxygen (% Vol.)	12.05	11.92	11.80	11.59	10.55	10.36	10.19	9.92
Molecular Weight	28.41	28.32	28.23	28.11	28.32	28.23	28.15	28.02
Volume flow (acfm) - calculated	3,371,551	3,282,606	3,197,670	3,109,381	3,395,582	3,306,909	3,221,846	3,134,129
Fuel Usage								
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]								
Heat input (MMBtu/hr, LHV)	2,421	2,320	2,230	2,137	2,421	2,320	2,230	2,137
Heat content (Btu/lb, LHV)	21,511	21,511	21,511	21,511	21,511	21,511	21,511	21,511
Fuel usage (lb/hr)- provided	112,537	107,877	103,660	99,362	112,537	107,877	103,660	99,362
- calculated	112,543	107,856	103,671	99,360	112,543	107,856	103,671	99,360
Heat content (Btu/cf, LHV)- assumed	918	918	918	918	918	918	918	918
Fuel density (lb/ft^3)	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427	0.0427
Fuel usage (cf/hr)- calculated	2,637,019	2,527,824	2,429,009	2,328,296	2,637,019	2,527,824	2,429,009	2,328,296
Fuel Usage - Duct Burner Only								
Fuel usage (lb/hr)- calculated	0	0	0	0	19,880	19,880	19,880	19,880
Fuel usage (cf/hr)- calculated	0	0	0	0	465,844	465,844	465,844	465,844
HRSG Stack								
HRSG - Stack Height (feet)	149	149	149	149	149	149	149	149
Diameter (feet)	22	22	22	22	22	22	22	22
HRSG Stack Flow Conditions								
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)^2 /4) x 3.14159] / 60 sec/min								
Mass flow (lb/hr)	4,969,000	4,769,000	4,595,000	4,403,000	4,989,629	4,789,629	4,615,629	4,423,630
HRSG Stack Temperature (°F)	196	195	195	195	186	185	185	184
Molecular weight	28.41	28.32	28.23	28.11	28.32	28.23	28.15	28.02
Volume flow (acfm)	1,399,125	1,344,704	1,299,388	1,251,392	1,387,188	1,333,147	1,288,818	1,239,598
Diameter (feet)	22	22	22	22	22	22	22	22
Velocity (ft/sec)- calculated	61.3	59.0	57.0	54.9	60.8	58.5	56.5	54.3

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft^2 (@14.67 psia).
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-2-SH
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

	CT Only Turbine Inlet Temperature				CT with Duct Burner Turbine Inlet Temperature			
Parameter	**35 °F**	**59 °F**	**75 °F**	**95 °F**	**35 °F w/DB**	**59 °F w/DB**	**75 °F w/DB**	**95 °F w/DB**
Particulate from CT, DB, and HRSG								
Total PM_{10} = PM_{10} (front half) + PM_{10} [$(NH_4)_2SO_4$] in HRSG only (back-half)								
a. PM_{10} (front half) (lb/hr)								
CT- provided	9.4	9.0	8.6	8.2	9.4	9.0	8.6	8.2
DB (lb/hr) - calculated	0.0	0.0	0.0	0.0	2.4	2.4	2.4	2.4
Total CT/DB emission rate (lb/hr)	9.4	9.0	8.6	8.2	11.8	11.4	11.0	10.6
b. PM_{10} [$(NH_4)_2SO_4$] from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})								
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3/lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3								
CT SO_2 emission rate (lb/hr)- calculated	15.1	14.4	13.9	13.3	15.1	14.4	13.9	13.3
Conversion (%) from SO_2 to SO_3 in CT	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
DB SO_2 emission rate (lb/hr)- calculated	--	--	--	--	2.7	2.7	2.7	2.7
Conversion (%) from SO_2 to SO_3 in DB	--	--	--	--	20.0	20.0	20.0	20.0
Remaining SO_2 (lb/hr) after conversion - calculated	13.6	13.0	12.5	12.0	15.7	15.1	14.6	14.1
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100	100	100	100	100
MW $(NH_4)_2SO_4$/ SO_3 (132/80)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	3.95	3.78	3.64	3.48	5.18	5.01	4.87	4.71
Total HRSG stack emission rate (lb/hr) [a + b] - provided	13.0	13.0	12.0	11.0				
-calculated	13.3	12.8	12.2	11.7	17.0	16.4	15.8	15.3
- maximum	13.3	13.0	12.2	11.7	17.0	16.4	15.8	15.3
(lb/mmBtu, HHV)	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur Dioxide								
SO_2 (lb/hr)= Natural gas (scf/hr) x sulfur content(gr/100 scf) x 1 lb/7000 gr x (lb SO_2 /lb S) /100								
Fuel use (cf/hr)	2,637,019	2,527,824	2,429,009	2,328,296	3,102,863	2,993,668	2,894,853	2,794,141
Sulfur content (grains/ 100 cf)	2	2	2	2	2	2	2	2
lb SO_2 /lb S (64/32)	2	2	2	2	2	2	2	2
HRSG stack emission rate (lb/hr) - calculated	15.1	14.4	13.9	13.3	17.7	17.1	16.5	16.0
Nitrogen Oxides								
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]								
NO_x (ppmv actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]								
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr								
Basis, ppm actual- calculated	30.1	30.0	29.8	29.7	34.0	34.0	34.0	34.0
CT/DB, ppmvd @15% O_2 - provided	25	25	25	25	24.1	24.1	24.0	24.0
Moisture (%)	8.36	9.14	9.88	11.03	9.70	10.52	11.31	12.50
Oxygen (%)	12.05	11.92	11.8	11.59	10.55	10.36	10.19	9.92
Oxygen (%) dry	13.15	13.12	13.09	13.03	11.68	11.58	11.49	11.34
Turbine Flow (acfm)	3,371,551	3,282,606	3,197,670	3,109,381	3,395,582	3,306,909	3,221,846	3,134,129
Turbine Flow (acfm), dry	3,089,689	2,982,576	2,881,740	2,766,416	3,066,240	2,958,861	2,857,517	2,742,267
Turbine Exhaust Temperature (°F)	1,121	1,139	1,151	1,168	1,121	1,139	1,151	1,168
CT/DB emission rate (lb/hr) - calculated	242.2	232.1	223.2	213.9	275.4	265.3	256.4	247.1
CT/DB Emission rate (lb/hr) - provided	250.0	239.0	230.0	220.0	283.3	272.3	263.3	253.3
HRSG Stack emission rate, ppmvd @ 15% O_2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
HRSG stack emission rate (lb/hr) - calculated	20.0	19.1	18.4	17.6	23.5	22.6	21.9	21.1
(Max. CT/DB calculated/provided)								
Carbon Monoxide								
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Molsure (%)]								
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]								
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr								
Basis, ppm actual- calculated	6.02	5.99	5.96	5.94	9.8	9.9	10.1	10.2
Basis, ppmvd @ 15% O_2 - provided	5.00	5.00	5.00	5.00	7.0	7.0	7.1	7.2
Moisture (%)	8.36	9.14	9.88	11.03	9.70	10.52	11.31	12.50
Oxygen (%)	12.05	11.92	11.80	11.59	10.55	10.36	10.19	9.92
Oxygen (%) dry	13.15	13.12	13.09	13.03	11.68	11.58	11.49	11.34
Turbine Flow (acfm)	3,371,551	3,282,606	3,197,670	3,109,381	3,395,582	3,306,909	3,221,846	3,134,129
Turbine Flow (acfm), dry	3,089,689	2,982,576	2,881,740	2,766,416	3,066,240	2,958,861	2,857,517	2,742,267
Turbine Exhaust Temperature (°F)	1,121	1,139	1,151	1,168	1,121	1,139	1,151	1,168
CT/DB emission rate (lb/hr) - calculated	29.5	28.3	27.2	26.0	48.5	47.3	46.2	45.0
CT/DB Emission rate (lb/hr) - provided	30.0	29.0	28.0	27.0	49.0	48.0	47.0	46.0
HRSG Stack emission rate, ppmvd @ 15% O_2 - provided	5.0	5.0	5.0	5.0	7.0	7.0	7.1	7.2
HRSG Stack emission rate (lb/hr)- calculated	30.0	29.0	28.0	27.0	49.0	48.0	47.0	46.0
(Max. CT/DB calculated/provided)								
Volatile Organic Compounds								
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]								
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]								
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr								
Basis, ppm actual- calculated	1.81	1.80	1.79	1.78	2.6	2.7	2.7	2.7
Basis, ppmvd @ 15% O_2 - provided	1.50	1.50	1.50	1.50	1.9	1.9	1.9	1.9
Moisture (%)	8.36	9.14	9.88	11.03	9.70	10.52	11.31	12.50
Oxygen (%) wet	12.05	11.92	11.80	11.59	10.55	10.36	10.19	9.92
Oxygen (%) dry	13.15	13.12	13.09	13.03	11.68	11.58	11.49	11.34
Turbine Flow (acfm)	3,371,551	3,282,606	3,197,670	3,109,381	3,395,582	3,306,909	3,221,846	3,134,129
Turbine Flow (acfm), dry	3,089,689	2,982,576	2,881,740	2,766,416	3,066,240	2,958,861	2,857,517	2,742,267
Turbine Exhaust Temperature (°F)	1,121	1,139	1,151	1,168	1,121	1,139	1,151	1,168
CT/DB emission rate (lb/hr) - calculated	5.05	4.84	4.66	4.46	7.43	7.22	7.03	6.84
CT/DB Emission rate (lb/hr) - provided	0.00	0.00	0.00	0.00	2.38	2.38	2.38	2.38
not used	7.00	6.70	6.50	6.20				
HRSG Stack emission rate, ppmvd @ 15% O_2 - provided	1.5	1.5	1.5	1.5	1.9	1.9	1.9	1.9
HRSG Stack emission rate (lb/hr)- calculated	5.1	4.84	4.7	4.5	7.4	7.2	7.0	6.8
(Max. CT/DB calculated/provided)								
Sulfuric Acid Mist								
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100								
CT SO_2 emission rate (lb/hr) - calculated	15.1	14.4	13.9	13.3	15.1	14.4	13.9	13.3
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0	2.7	2.7	2.7	2.7
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20	20	20	20	20
SCR SO_2 (lb/hr)(remaining SO_2 after conversion) - calc	13.6	13.0	12.5	12.0	15.7	15.1	14.6	14.1
SCR Conversion to H_2SO_4 (% by weight) - provided	3	3	3	3	3	3	3	3
HRSG Stack emission rate (lb/hr)	2.93	2.81	2.70	2.59	3.84	3.72	3.61	3.50
Lead								
Lead (lb/hr) = NA								
Emission Rate Basis	NA	NA	NA	NA	NA	NA	NA	NA
Emission rate (lb/hr)	NA	NA	NA	NA	NA	NA	NA	NA

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-3-SH
DESIGN INFORMATION AND STACK PARAMETERS
FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, 75% LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Combustion Turbine Performance				
Heat Input (MMBtu/hr, LHV)	1,946	1,828	1,745	1,640
(MMBtu/hr, HHV)	2,161	2,030	1,938	1,822
Relative Humidity (%)	60	60	60	50
Fuel heating value (Btu/lb, LHV)	21,511	21,511	21,511	21,511
(Btu/lb, HHV)	23,893	23,893	23,893	23,893
(HHV/LHV)	1.111	1.111	1.111	1.111
CT Exhaust Flow				
Mass flow (lb/hr)- provided	4,067,000	3,887,500	3,753,000	3,575,000
Temperature (°F) - provided	1,149.1	1,160.6	1,168.5	1,180.7
Moisture (% Vol.)	8.22	8.65	9.27	10.13
Oxygen (% Vol.)	12.21	12.25	12.21	12.15
Molecular Weight	28.42	28.36	28.29	28.19
Volume flow (acfm) - calculated	2,807,747	2,708,602	2,634,236	2,536,737
Fuel Usage				
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]				
Heat input (MMBtu/hr, LHV)	1,946	1,828	1,745	1,640
Heat content (Btu/lb, LHV)	21,511	21,511	21,511	21,511
Fuel usage (lb/hr)- provided	90,449	84,967	81,126	76,250
- calculated	90,445	84,962	81,112	76,257
Heat content (Btu/cf, LHV)- assumed	918	918	918	918
Fuel density (lb/ft^3)	0.0427	0.0427	0.0427	0.0427
Fuel usage (cf/hr)- calculated	2,119,443	1,990,986	1,900,982	1,786,725
HRSG Stack				
HRSG - Stack Height (feet)	149	149	149	149
Diameter (feet)	22	22	22	22
HRSG Stack Flow Conditions				
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)² /4) x 3.14159] / 60 sec/min				
Mass flow (lb/hr)	4,067,000	3,887,500	3,753,000	3,575,000
HRSG Stack Temperature (°F)	184	185	186	187
Molecular weight	28.42	28.36	28.29	28.19
Volume flow (acfm)	1,123,727	1,078,059	1,044,959	1,000,347
Diameter (feet)	22	22	22	22
Velocity (ft/sec)- calculated	49.3	47.3	45.8	43.9

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft² (@14.67 psia)
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-4-SH
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, 75% LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Particulate from CT and HRSG				
Total PM_{10} = PM_{10} (front half) + PM_{10} [$(NH_4)_2SO_4$] in HRSG only (back-half)				
a. PM_{10} (front half) (lb/hr)				
Particulate from CT- provided	7.7	7.4	7.1	6.7
b. PM_{10} [$(NH_4)_2SO_4$] from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})				
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3 /lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3				
SO_2 emission rate (lb/hr)- calculated	12.1	11.4	10.9	10.2
Conversion (%) from SO_2 to SO_3	10.0	10.0	10.0	10.0
Remaining SO_2 (lb/hr) in CT after conversion - calculated	10.9	10.2	9.8	9.2
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100
MW $(NH_4)_2$ SO_4/ SO_3 (132/80)	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	3.17	2.98	2.85	2.67
Total HRSG stack emission rate (lb/hr) [a + b] - provided	11	11	9.8	9.3
-calculated	10.9	10.3	9.9	9.4
- maximum	11.0	11.0	9.9	9.4
(lb/mmBtu, HHV)	NA	NA	NA	NA
Sulfur Dioxide				
SO_2 (lb/hr)= Natural gas (scf/hr) x sulfur content(gr/100 scf) x 1 lb/7000 gr x (lb SO_2 /lb S) /100				
Fuel use (cf/hr)	2,119,443	1,990,986	1,900,982	1,786,725
Sulfur content (grains/ 100 cf)	2	2	2	2
lb SO_2 /lb S (64/32)	2	2	2	2
HRSG Stack emission rate (lb/hr)- calculated	12.1	11.4	10.9	10.2
Nitrogen Oxides				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
NO_x (ppm actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	29.5	29.0	28.6	28.1
CT / DB, ppmvd @15% O_2 - provided	25	25	25	25
Moisture (%)	8.22	8.65	9.27	10.13
Oxygen (%)	12.21	12.25	12.21	12.15
Oxygen (%) dry	13.30	13.41	13.46	13.52
Turbine Flow (acfm)	2,807,747	2,708,602	2,634,236	2,536,737
Turbine Flow (acfm), dry	2,576,950	2,474,308	2,390,042	2,279,766
Turbine Exhaust Temperature (°F)	1,149	1,161	1,169	1,181
CT Emission rate (lb/hr) - calculated	194.5	182.8	174.6	163.9
CT Emission rate (lb/hr) - provided	201.0	188.0	180.0	169.0
HRSG Stack emission rate, ppmvd @ 15% O_2	2.0	2.0	2.0	2.0
HRSG Stack emission rate (lb/hr) - calculated	16.1	15.0	14.4	13.5
(Max. CT/DB calculated/provided)				
Carbon Monoxide				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	11.8	11.6	11.4	11.2
Basis, ppmvd @ 15% O_2 - provided	10	10	10	10
Moisture (%)	8.22	8.65	9.27	10.13
Oxygen (%)	12.21	12.25	12.21	12.15
Oxygen (%) dry	13.30	13.41	13.46	13.52
Turbine Flow (acfm)	2,807,747	2,708,602	2,634,236	2,536,737
Turbine Flow (acfm), dry	2,576,950	2,474,308	2,390,042	2,279,766
Turbine Exhaust Temperature (°F)	1,149	1,161	1,169	1,181
HRSG Exhaust Temperature (°F)	184	185	186	187
CT Emission rate (lb/hr) - calculated	47.4	44.5	42.5	39.9
CT Emission rate (lb/hr) - provided	49.0	46.0	44.0	41.0
HRSG Stack emission rate, ppmvd @ 15% O_2	10	10	10	10
HRSG Stack emission rate (lb/hr)- calculated	49.0	46.0	44.0	41.0
(Max. CT/DB calculated/provided)				
Volatile Organic Compounds				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppmvd - calculated	1.77	1.74	1.72	1.69
Basis, ppmvd @ 15% O_2 - provided	1.5	1.5	1.5	1.5
Moisture (%)	8.22	8.65	9.27	10.13
Oxygen (%)	12.21	12.25	12.21	12.15
Oxygen (%) dry	13.30	13.41	13.46	13.52
Turbine Flow (acfm)	2,807,747	2,708,602	2,634,236	2,536,737
Turbine Flow (acfm), dry	2,576,950	2,474,308	2,390,042	2,279,766
Turbine Exhaust Temperature (°F)	1,149	1,161	1,169	1,181
HRSG Exhaust Temperature (°F)	184	184	184	184
CT Emission rate (lb/hr) - calculated	4.06	3.82	3.64	3.42
CT Emission rate (lb/hr) - provided	0.00	0.00	0.00	0.00
not used (at 2 ppmvd)	5.60	0.00	5.10	4.80
HRSG Stack emission rate, ppmvd @ 15% O_2	1.5	1.5	1.5	1.5
HRSG Stack emission rate (lb/hr)- calculated	4.06	3.82	3.64	3.42
(Max. CT/DB calculated/provided)				
Sulfuric Acid Mist				
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100				
CT SO_2 emission rate (lb/hr) - calculated	12.1	11.4	10.9	10.2
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20
SCR SO_2 emission rate (lb/hr) - calculated (remaining SO_2 after conversion)	10.9	10.2	9.8	9.2
HRSG Stack emission rate (lb/hr)- calculated	2.36	2.21	2.11	1.99
Lead				
Lead (lb/hr) = NA				
Emission Rate Basis	NA	NA	NA	NA
HRSG Stack emission rate (lb/hr)	NA	NA	NA	NA

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-5-SH
DESIGN INFORMATION AND STACK PARAMETERS
FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, BASE LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Combustion Turbine Performance				
Heat Input (MMBtu/hr, LHV)	2,420	2,268	2,162	2,028
(MMBtu/hr, HHV)	2,565	2,404	2,292	2,150
Relative Humidity (%)	60	60	60	50
Fuel heating value (Btu/lb, LHV)	18,387	18,387	18,387	18,387
(Btu/lb, HHV)	19,490	19,490	19,490	19,490
(HHV/LHV)	1.060	1.060	1.060	1.060
CT Exhaust Flow				
Mass Flow (lb/hr)- provided	5,090,824	4,814,396	4,613,552	4,350,270
Temperature (°F) - provided	1,071.0	1,092.0	1,106.0	1,127.0
Moisture (% Vol.)	7.97	8.46	9.12	10.02
Oxygen (% Vol.)	11.91	11.88	11.80	11.68
Molecular Weight	28.66	28.59	28.52	28.42
Volume flow (acfm) - calculated	3,315,909	3,186,273	3,088,451	2,962,342
Fuel Usage				
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu (Fuel Heat Content, Btu/lb (LHV))				
Heat input (MMBtu/hr, LHV)	2,420	2,268	2,162	2,028
Heat content (Btu/lb, LHV)	18,387	18,387	18,387	18,387
Fuel usage (lb/hr)- provided	131,600	123,371	117,608	110,306
- calculated	131,615	123,348	117,583	110,295
HRSG Stack				
HRSG - Stack Height (feet)	149	149	149	149
Diameter (feet)	22	22	22	22
HRSG Stack Flow Conditions				
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)^2 /4) x 3.14159] / 60 sec/min				
Mass flow (lb/hr) - provided	5,090,824	4,814,396	4,613,552	4,350,270
HRSG Stack Temperature (^{0}F)	359	357	355	354
Molecular weight	28.66	28.59	28.52	28.42
Volume flow (acfm)	1,773,827	1,677,310	1,607,335	1,519,437
Diameter (feet)	22	22	22	22
Velocity (ft/sec)- calculated	77.8	73.5	70.5	66.6

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft^2 (@14.67 psia).
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-6-SH
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, BASE LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Particulate from CTand SCR				
Total PM_{10} = PM_{10} (front half) + PM_{10} [$(NH_4)_2SO_4$] in HRSG only (back-half)				
a. PM_{10} (front half) (lb/hr)				
Particulate from CT- provided	not avail.	not avail.	not avail.	not avail.
b. PM_{10} ($(NH_4)_2SO_4$) from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})				
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3/lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$/ lb SO_3				
SO_2 emission rate (lb/hr)- calculated	3.9	3.7	3.5	3.3
Conversion (%) from SO_2 to SO_3	10.0	10.0	10.0	10.0
Remaining SO_2 (lb/hr) in CT after conversion - calculated	3.6	3.3	3.2	3.0
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100
MW $(NH_4)_2$ SO_4/ SO_3 (132/80)	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	1.03	0.97	0.92	0.87
Total HRSG stack emission rate (lb/hr) [a + b] - provided	30.0	30.0	30.0	30.0
-calculated				
- maximum				
(lb/mmBtu, HHV)	NA	NA	NA	NA
Sulfur Dioxide				
SO_2 (lb/hr)= Fuel oil (lb/hr) x sulfur content(% weight) x (lb SO_2 /lb S) /100				
Fuel oil Sulfur Content	0.0015%	0.0015%	0.0015%	0.0015%
Fuel oil use (lb/hr)	131,600	123,371	117,608	110,306
lb SO_2 / lb S (64/32)	2	2	2	2
HRSG Stack emission rate (lb/hr)- calculated	3.9	3.7	3.5	3.3
Nitrogen Oxides				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
NO_x (ppm actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	52.1	51.6	51.2	50.7
CT/DB, ppmvd @15% O_2	42	42	42	42
Moisture (%)	7.97	8.46	9.12	10.02
Oxygen (%)	11.91	11.88	11.80	11.68
Oxygen (%) dry	12.94	12.98	12.98	12.98
Turbine Flow (acfm)	3,315,909	3,186,273	3,088,451	2,962,342
Turbine Flow (acfm), dry	3,051,631	2,916,714	2,806,784	2,665,515
Turbine Exhaust Temperature (°F)	1,071	1,092	1,106	1,127
CT Emission rate (lb/hr) - calculated	426.0	399.9	381.0	357.2
CT emission rate (lb/hr) - provided	448.0	420.0	400.0	375.0
HRSG Stack emission rate, ppmvd @ 15% O_2 - provided	8	8	8	8
HRSG Stack emission rate (lb/hr) - calculated	85.3	80.0	76.2	71.4
(Max. CT/DB calculated/provided)				
Carbon Monoxide				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	12.4	12.3	12.2	12.1
Basis, ppmvd @ 15% O_2 - provided	10	10	10	10
Moisture (%)	7.97	8.46	9.12	10.02
Oxygen (%)	11.91	11.88	11.80	11.68
Oxygen (%) dry	12.94	12.98	12.98	12.98
Turbine Flow (acfm)	3,315,909	3,186,273	3,088,451	2,962,342
Turbine Flow (acfm), dry	3,051,631	2,916,714	2,806,784	2,665,515
Turbine Exhaust Temperature (°F)	1,071	1,092	1,106	1,127
HRSG Exhaust Temperature (°F)	359	357	355	354
CT Emission rate (lb/hr) - calculated	61.7	58.0	55.2	51.8
CT emission rate (lb/hr) - provided	65.0	61.0	58.0	54.0
HRSG Stack emission rate, ppmvd @ 15% O_2	10.0	10.0	10.0	10.0
HRSG Stack emission rate (lb/hr) - calculated	65.0	61.0	58.0	54.0
(Max. CT/DB calculated/provided)				
Volatile Organic Compounds				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	2.5	2.5	2.4	2.4
Basis, ppmvd @ 15% O_2 - provided	2.0	2.0	2.0	2.0
Moisture (%)	7.97	8.46	9.12	10.02
Oxygen (%)	11.91	11.88	11.80	11.68
Oxygen (%-dry)	12.94	12.98	12.98	12.98
Turbine Flow (acfm)	3,315,909	3,186,273	3,088,451	2,962,342
Turbine Flow (acfm), dry	3,051,631	2,916,714	2,806,784	2,665,515
Turbine Exhaust Temperature (°F)	1,071	1,092	1,106	1,127
CT Emission rate (lb/hr) - calculated	7.1	6.6	6.3	5.9
CT emission rate (lb/hr) - provided	7.4	7.0	6.6	6.2
HRSG Stack emission rate, ppmvd @ 15% O_2	2.0	2.0	2.0	2.0
HRSG Stack emission rate (lb/hr) - calculated	7.4	7.0	6.6	6.2
(Max. CT/DB calculated/provided)				
Sulfuric Acid Mist				
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100				
CT SO_2 emission rate (lb/hr) - calculated	3.9	3.7	3.5	3.3
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20
SCR SO_2 emission rate (lb/hr) - calculated (remaining SO_2 after conversion)	3.6	3.3	3.2	3.0
SCR Conversion to H_2SO_4 (% by weight) - provided	3	3	3	3
HRSG Stack emission rate (lb/hr)- calculated	0.77	0.72	0.69	0.64
- provided				
Lead				
Lead (lb/hr) = Basis (lb/10^{12} Btu) x Heat Input (MMBtu/hr) / 1,000,000 MMBtu/10^{12} Btu				
Emission Rate Basis (lb/10^{12} Btu)	14	14	14	14
Heat Input (MMBtu/hr, HHV)	2,565	2,404	2,292	2,150
HRSG Stack emission rate (lb/hr)- calculated	0.0359	0.0337	0.0321	0.0301

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-7-SH
DESIGN INFORMATION AND STACK PARAMETERS
FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, 75% LOAD

	Turbine Inlet Temperature			
Parameter	**35 °F**	**59 °F**	**75 °F**	**95 °F**
Combustion Turbine Performance				
Heat Input (MMBtu/hr, LHV)	1,979	1,857	1,772	1,664
(MMBtu/hr, HHV)	2,098	1,968	1,878	1,764
Relative Humidity (%)	60	60	60	50
Fuel heating value (Btu/lb, LHV)	18,387	18,387	18,387	18,387
(Btu/lb, HHV)	19,490	19,490	19,490	19,490
(HHV/LHV)	1.060	1.060	1.060	1.060
CT Exhaust Flow				
Mass Flow (lb/hr)- provided	4,102,785	3,920,619	3,786,372	3,606,773
Temperature (°F) - provided	1,126	1,136	1,143	1,154
Moisture (% Vol.)	7.78	8.2	8.81	9.66
Oxygen (% Vol.)	11.93	11.99	11.97	11.92
Molecular Weight	28.68	28.62	28.54	28.44
Volume flow (acfm) - calculated	2,766,557	2,666,078	2,592,584	2,495,524
Fuel Usage				
Fuel usage (lb/hr) = Heat Input (MMBtu/hr) x 1,000,000 Btu/MMBtu [Fuel Heat Content, Btu/lb (LHV)]				
Heat input (MMBtu/hr, LHV)	1,979	1,857	1,772	1,664
Heat content (Btu/lb, LHV)	18,387	18,387	18,387	18,387
Fuel usage (lb/hr)- provided	107,635	100,987	96,398	90,522
- calculated	107,630	100,995	96,372	90,499
HRSG Stack				
HRSG - Stack Height (feet)	149	149	149	149
Diameter (feet)	22	22	22	22
HRSG Stack Flow Conditions				
Velocity (ft/sec) = Volume flow (acfm) / [((diameter)^2 /4) x 3.14159] / 60 sec/min				
Mass flow (lb/hr)	4,102,785	3,920,619	3,786,372	3,606,773
HRSG Stack Temperature (°F)	350	348	346	345
Molecular weight	28.68	28.62	28.54	28.44
Volume flow (acfm)	1,412,933	1,349,744	1,303,570	1,244,669
Diameter (feet)	22	22	22	22
Velocity (ft/sec)- calculated	61.9	59.2	57.2	54.6
Velocity (ft/sec)- provided	55	53	52	50

Note: Universal gas constant = 1,545.4 ft-lb(force)/°R; atmospheric pressure = 2,112.5 lb(force)/ft^2 (@14.67 psia).
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-8-SH
MAXIMUM EMISSIONS FOR CRITERIA POLLUTANTS FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, 75% LOAD

Parameter	Turbine Inlet Temperature 35 °F	59 °F	75 °F	95 °F
Particulate from CTand SCR				
Total PM_{10} = PM_{10} (front half) + PM_{10} $[(NH_4)_2SO_4]$ in HRSG only (back-half)				
a. PM_{10} (front half) (lb/hr)				
Particulate from CT- provided	0.0	0.0	0.0	0.0
b. PM_{10} $[(NH_4)_2SO_4]$ from HRSG only (back half) = Sulfur trioxide from conversion of SO_2 converts to ammonium sulfate (= PM_{10})				
Particulate from conversion of SO_2 = SO_2 emissions (lb/hr) x conversion of SO_2 to SO_3 in CT and in SCR x lb SO_3/lb SO_2 x conversion of SO_3 to $(NH_4)_2SO_4$ x lb $(NH_4)_2SO_4$ / lb SO_3				
SO_2 emission rate (lb/hr)- calculated	3.2	3.0	2.9	2.7
Conversion (%) from SO_2 to SO_3 in CT	10.0	10.0	10.0	10.0
Remaining SO_2 (lb/hr) in CT after conversion - calculated	2.9	2.7	2.6	2.4
Conversion (%) from SO_2 to SO_3 in SCR	3.0	3.0	3.0	3.0
MW SO_3/ SO_2 (80/64)	1.3	1.3	1.3	1.3
Conversion (%) from SO_3 to $(NH_4)_2(SO_4)$	100	100	100	100
MW $(NH_4)_2$ SO_4/ SO_3 (132/80)	1.7	1.7	1.7	1.7
HRSG Particulate as $(NH_4)_2(SO_4)$ (lb/hr)- calculated	0.85	0.79	0.76	0.71
Total HRSG stack emission rate (lb/hr) [a + b] - provided	30.0	30.0	30.0	30.0
-calculated	0.8	0.8	0.8	0.7
- maximum	30.0	30.0	30.0	30.0
(lb/mmBtu, HHV)	NA	NA	NA	NA
Sulfur Dioxide				
SO_2 (lb/hr)= Fuel oil (lb/hr) x sulfur content(% weight) x (lb SO_2 /lb S) /100				
Fuel oil Sulfur Content	0.0015%	0.0015%	0.0015%	0.0015%
Fuel oil use (lb/hr)	107,635	100,987	96,398	90,522
lb SO_2 / lb S (64/32)	2	2	2	2
HRSG Stack emission rate (lb/hr)- calculated	3.2	3.0	2.9	2.7
Nitrogen Oxides				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
NO_x (ppm actual) = NO_x (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
NO_x (lb/hr) = NO_x (ppm actual) x Volume flow (acfm) x 46 (mole. wgt NO_x) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	52.3	51.2	50.5	49.6
CT/DB, ppmvd @15% O_2	42	42	42	42
Moisture (%)	7.78	8.2	8.81	9.66
Oxygen (%)	11.93	11.99	11.97	11.92
Oxygen (%) dry	12.94	13.06	13.13	13.19
Turbine Flow (acfm)	2,766,557	2,666,078	2,592,584	2,495,524
Turbine Flow (acfm), dry	2,551,319	2,447,460	2,364,178	2,254,456
Turbine Exhaust Temperature (°F)	1,126	1,136	1,143	1,154
CT emission rate (lb/hr)	344.1	322.9	307.9	289.1
CT emission rate (lb/hr)(provided)	363.0	340.0	325.0	305.0
HRSG Stack, ppmvd @ 15% O_2 - provided	8.0	8.0	8.0	8.0
HRSG Stack emission rate (lb/hr)- calculated	69.1	64.8	61.9	58.1
(Max. CT/DB calculated/provided)				
Carbon Monoxide				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
CO (ppmv wet or actual) = CO (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
CO (lb/hr) = CO (ppm actual) x Volume flow (acfm) x 28 (mole. wgt CO) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	12.4	12.2	12.0	11.8
Basis, ppmvd @ 15% O_2 - provided	10	10	10	10
Moisture (%)	7.78	8.2	8.81	9.66
Oxygen (%)	11.93	11.99	11.97	11.92
Oxygen (%) dry	12.94	13.06	13.13	13.19
Turbine Flow (acfm)	2,766,557	2,666,078	2,592,584	2,495,524
Turbine Flow (acfm), dry	2,551,319	2,447,460	2,364,178	2,254,456
Turbine Exhaust Temperature (°F)	1,126	1,136	1,143	1,154
HRSG Exhaust Temperature (°F)	350	348	346	345
CT emission rate (lb/hr)	49.9	46.8	44.6	41.9
CT emission rate (lb/hr)(provided)	53.0	49.0	47.0	44.0
HRSG Stack, ppmvd @ 15% O_2 - provided	10.0	10.0	10.0	10.0
HRSG Stack emission rate (lb/hr)- calculated	53.0	49.0	47.0	44.0
(Max. CT/DB calculated/provided)				
Volatile Organic Compounds				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisture (%)]				
VOC (ppmv wet or actual) = VOC (ppmvd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
VOC (lb/hr) = VOC (ppm actual) x Volume flow (acfm) x 16 (mole. wgt CH_4) x 2112.5 lb/ft^2 (pressure) / [1545.4 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
Basis, ppm actual- calculated	2.5	2.4	2.4	2.4
Basis, ppmvd @ 15% O_2 - provided	2.0	2.0	2.0	2.0
Moisture (%)	7.78	8.20	8.81	9.66
Oxygen (%)	11.93	11.99	11.97	11.92
Oxygen (%) dry	12.94	13.06	13.13	13.19
Turbine Flow (acfm)	2,766,557	2,666,078	2,592,584	2,495,524
Turbine Flow (acfm), dry	2,551,319	2,447,460	2,364,178	2,254,456
Turbine Exhaust Temperature (°F)	1,126	1,136	1,143	1,154
HRSG Exhaust Temperature (°F)	350	348	346	345
CT emission rate (lb/hr) (calculated)	5.7	5.3	5.1	4.8
CT emission rate (lb/hr)(provided)	6.0	5.6	5.4	5.1
HRSG Stack, ppmvd @ 15% O_2 - provided	2.0	2.0	2.0	2.0
HRSG Stack emission rate (lb/hr)- calculated	6.00	5.60	5.40	5.10
(Max. CT/DB calculated/provided)				
Sulfuric Acid Mist				
Sulfuric Acid Mist (lb/hr)= SO_2 emission (lb/hr) x Conversion to H_2SO_4 (% by weight)/100				
CT SO_2 emission rate (lb/hr) - provided	3.2	3.0	2.9	2.7
CT Conversion to H_2SO_4 (% by weight) - provided	10	10	10	10
DB SO_2 emission rate (lb/hr) - provided	0	0	0	0
DB Conversion to H_2SO_4 (%) - provided	20	20	20	20
SCR SO_2 emission rate (lb/hr) - calculated (remaining SO_2 after conversion)	2.9	2.7	2.6	2.4
SCR Conversion to H_2SO_4 (% by weight) - provided	3	3	3	3
HRSG Stack emission rate (lb/hr)- calculated	0.63	0.59	0.56	0.53
Lead				
Lead (lb/hr) = Basis (lb/10^{12} Btu) x Heat Input (MMBtu/hr) / 1,000,000 MMBtu/10^{12} Btu				
Emission Rate Basis (lb/10^{12} Btu)	14	14	14	14
Heat Input (MMBtu/hr, HHV)	2,098	1,968	1,878	1,764
HRSG Stack emission rate (lb/hr)- calculated	0.0294	0.0276	0.0263	0.0247

Note: ppmvd= parts per million, volume dry; O_2= oxygen.
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-9-SH
REGULATED AND HAZARDOUS AIR POLLUTANT EMISSION FACTORS AND EMISSIONS FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

Parameter	Emission Rate (lb/hr) firing Natural Gas for Operating Conditions of Base Load (1)		Natural Gas Maximum Annual Gas	
Ambient Temperature (°F):	59 °F	59 °F w/DB	Compressors	59 °F
			1	3
HIR (MMBtu/hr):	2,577	3,052	CT/HRSG	CTs/HRSGs
Sulfuric acid mist	2.10	3.72	11.5	34.6
HAPs (Section 112(b) of Clean Air Act)				
1,3-Butadiene	0.001108	0.001312	0.005	0.015
Acetaldehyde	0.1031	0.1221	0.479	1.437
Acrolein	0.0165	0.0195	0.077	0.230
Benzene	0.0309	0.0366	0.144	0.431
Ethylbenzene	0.0825	0.0977	0.383	1.149
Formadehyde	0.551	0.654	2.562	7.686
Naphthalene	0.00335	0.00397	0.016	0.047
Polycyclic Aromatic Hydrocarbons (PAH) (3)	0.00567	0.00671	0.026	0.079
Propylene Oxide	0.0747	0.0885	0.347	1.041
Toluene	0.0850	0.1007	0.395	1.185
Xylene	0.165	0.195	0.766	2.298
Antimony	0.0	0.0	0.0	0.00
Arsenic	0.0	0.0	0.0	0.00
Beryllium	0.0	0.0	0.0	0.00
Cadmium	0.0	0.0	0.0	0.00
Chromium	0.0	0.0	0.0	0.00
Lead	0.0	0.0	0.0	0.00
Manganese	0.0	0.0	0.0	0.00
Mercury	0.0	0.0	0.0	3.59E-05
Nickel	0.0	0.0	0.0	0.00
Selenium	0.0	0.0	0.0	0.00
HAPs (Total)	1.119	1.327	5.20	15.6

(1) Emissions based on the following emission factors and conversion factors for firing natural gas:

Emission Factors		Value	Reference
Sulfuric acid mist		10	%; Conversion of SO_2 to SO_3 in gas turbine
1,3-Butadiene	(a)	0.43	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Acetaldehyde		40	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Acrolein		6.4	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Benzene		12	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Ethylbenzene		32	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Formadehyde		0.091	ppmvd @15% O_2 (see Table 9a)
Naphthalene		1.3	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Polycyclic Aromatic Hydrocarbons (PAH)		2.2	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Propylene Oxide	(a)	29	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000
Toluene		33	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000. Database
Xylene		64	lb/10^{12} Btu; AP-42,Table 3.1-3. EPA 2000

Antimony	0.00E+00
Arsenic	0.00E+00
Beryllium	0.00E+00
Cadmium	0.00E+00
Chromium	0.00E+00
Lead	0.00E+00
Manganese	0.00E+00
Mercury	1.00E-03
Nickel	0.00E+00
Selenium	0.00E+00

(a) Based on 1/2 the detection limit; expected emissions are lower.

(2) Annual emissions based on ambient temperature of 59 °F firing natural gas for following hours:

5880 CT
2880 CT/DB

(3) Assumed to be representative of Polycyclic Organic Matter (POM) emissions, a regulated HAP.

TABLE A-9a-SH
MAXIMUM FORMALDEHYDE EMISSIONS
FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, NATURAL GAS, BASE LOAD

Parameter	CT Only Turbine Inlet Temperature			
	35 °F	59 °F	59 °F w/DB	95 °F
Formaldehyde (CH_2O) MW = 30				Gas Compressors
CH_2O (lb/hr) = CH_2O (ppm actual) x Volume flow (acfm) x 30 (mole. wgt CH_2O) x 2116.8 lb/ft^2 (pressure) / [1545.7 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
CH_2O (ppm actual) = CH_2O (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
Basis, ppm actual- calculated	0.110	0.109	0.129	0.108
CT, ppmvd @15% O_2	0.091	0.091	0.091	0.091
Moisture (%)	8.36	9.14	10.52	11.03
Oxygen (%)	12.05	11.92	10.36	11.59
Oxygen (%) dry	13.15	13.12	11.58	13.03
Exhaust Flow (acfm)	1,399,125	1,344,704	1,333,147	1,251,392
Exhaust Temperature (°F)	196	195	185	195
CT Emission rate (lb/hr)	0.575	0.551	0.654	0.508
CT Emission rate (lb/10^{12} Btu) (HHV)	213.8	213.8	254.0	213.9

Note: ppmvd= parts per million, volume dry; O2= oxygen.
Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-10-SH

REGULATED AND HAZARDOUS AIR POLLUTANT EMISSION FACTORS AND EMISSIONS FOR THE CONVERSION PROJECT, SIEMENS H CT

Parameter	Emission Rate (lb/hr) Distillate Fuel Oil (1)	Maximum Annual Emissions (TPY)			Emission Rate (lb/hr) Natural Gas (4)		Maximum Annual Emissions (TPY)		
	Base Load	Gas			Base Load		Natural Gas and Fuel Oil (5)		
Ambient Temperature (°F):	59 °F	Compressors							
HIR (MMBtu/hr):	2,404	3 CT/HRSGs (500 hrs on oil)	3 CT/HRSGs (1,000 hrs on oil)	3 CT/HRSGs (1,500 hrs on oil)	1 CT/HRSGs (CT Only)	1 CT/HRSGs (CT + DB)	3 CT/HRSGs (500 hrs on oil)	3 CT/HRSGs (1,000 hrs on oil)	3 CT/HRSGs (1,500 hrs on oil)
Sulfuric acid mist	0.72	0.54	1.08	1.62	2.10	3.72	33.6	32.5	31.5
HAPs (Section 112(b) of Clean Air Act)									
1,3-Butadiene	0.0385	0.029	0.058	0.087	0.001	0.001	0.043	0.071	0.099
Acetaldehyde	0.00	0.00	0.00	0.00	0.103	0.122	1.359	1.282	1.205
Acrolein	0.00	0.00	0.00	0.00	0.016	0.020	0.217	0.205	0.193
Benzene	0.132	0.099	0.198	0.298	0.031	0.037	0.507	0.583	0.659
Ethylbenzene	0.00	0.00	0.00	0.00	0.082	0.098	1.087	1.026	0.964
Formadehyde	0.565	0.424	0.848	1.271	0.551	0.654	7.697	7.707	7.718
Naphthalene	0.0841	0.063	0.126	0.189	0.003	0.004	0.107	0.168	0.228
Polycyclic Aromatic Hydrocarbons (PAH) (3)	0.0962	0.072	0.144	0.216	0.006	0.007	0.147	0.215	0.283
Propylene Oxide	0.00	0.00	0.00	0.00	0.075	0.089	0.985	0.929	0.873
Toluene	0.00	0.00	0.00	0.00	0.085	0.101	1.121	1.058	0.994
Xylene	0.00	0.00	0.00	0.00	0.165	0.195	2.175	2.051	1.927
Antimony	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	0.0264	0.020	0.040	0.060	0.00	0.00	0.020	0.040	0.060
Beryllium	0.000745	0.0006	0.001	0.002	0.00	0.00	0.00	0.00	0.00
Cadmium	0.01154	0.0087	0.017	0.026	0.00	0.00	0.009	0.017	0.026
Chromium	0.0264	0.020	0.040	0.060	0.00	0.00	0.020	0.040	0.060
Lead	0.0337	0.025	0.050	0.076	0.00	0.00	0.025	0.050	0.076
Manganese	1.90	1.424	2.849	4.273	0.00	0.00	1.42	2.85	4.27
Mercury	0.00288	0.0022	0.004	0.006	0.00	0.00	0.00	0.00	0.01
Nickel	0.01106	0.0083	0.017	0.025	0.00	0.00	0.008	0.017	0.025
Selenium	0.0601	0.045	0.090	0.135	0.00	0.00	0.045	0.090	0.135
HAPs (Total)	2.99	2.24	4.48	6.72	1.1	1.3	17.0	18.4	19.8

(1) Emissions based on the following emission factors and conversion factors for firing distillate fuel oil:

Emission Factors		Value	Reference
Sulfuric acid mist		5	%; Conversion of SO_2 to SO_3 in gas turbine
1,3-Butadiene	(a)	16	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Acetaldehyde		0.0	
Acrolein		0.0	
Benzene		55	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Ethylbenzene		0.0	
Formadehyde		0.091	ppmvd @15% O_2 (see Table 10a)
Naphthalene		35	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Polycyclic Aromatic Hydrocarbons (PAH)		40	lb/10^{12} Btu; AP-42,Table 3.1-4. EPA 2000
Propylene Oxide		0.0	
Toluene		0.0	
Xylene		0.0	
Antimony		0.0	
Arsenic	(a)	11	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Beryllium	(a)	0.31	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Cadmium		4.8	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Chromium		11	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Lead		14	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Manganese		790	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Mercury		1.2	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Nickel	(a)	4.6	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000
Selenium	(a)	25	lb/10^{12} Btu; AP-42,Table 3.1-5. EPA 2000

(a) Based on 1/2 the detection limit; expected emissions are lower.

(2) Annual emissions based on ambient temperature of 59 °F and firing fuel oil at base load for : 500 hours 1,000 hours 1,500 hours

(3) Assumed to be representative of Polycyclic Organic Matter (POM) emissions, a regulated HAP.

(4) Natural gas firing emission rates based on Table A-9.

(5) Maximum total annual emissions based on the following combination of operating hours:

Oil firing at base load for :	500 hours	1,000 hours	1,500 hours
Natural gas at base load for :	5,380 hours	4,880 hours	4,380 hours
Natural gas with duct firing at base load for :	2,880 hours	2,880 hours	2,880 hours

TABLE A-10a-SH
MAXIMUM FORMALDEHYDE EMISSIONS
FOR THE CONVERSION PROJECT
SIEMENS H CT, DRY LOW NO_x COMBUSTOR, DISTILLATE OIL, BASE LOAD

	CT Only Turbine Inlet Temperature			
Parameter	**35 °F**	**59 °F**	**75 °F**	**95 °F**
Formaldehyde (CH_2O) MW = 30				Gas Compressors
CH_2O (lb/hr) = CH_2O (ppm actual) x Volume flow (acfm) x 30 (mole. wgt CH_2O) x 2116.8 lb/ft^2 (pressure) / [1545.7 (gas constant, R) x Actual Temp. (°R)] x 60 min/hr				
CH_2O (ppm actual) = CH_2O (ppmd @ 15%O_2) x [(20.9 - O_2 dry)/(20.9 - 15)] x [1- Moisture(%)/100]				
Oxygen (%, dry)(O_2 dry) = Oxygen (%)/[1-Moisure (%)]				
Basis, ppmvw - calculated	0.113	0.112	0.111	0.110
CT, ppmvd @15% O_2	0.091	0.091	0.091	0.091
Moisture (%)	7.97	8.46	9.12	10.02
Oxygen (%)	11.91	11.88	11.80	11.68
Oxygen (%) dry	12.94	12.98	12.98	12.98
Exhaust Flow (acfm)	1,773,827	1,677,310	1,607,335	1,519,437
Exhaust Temperature (°F)	359	357	355	354
CT Emission rate (lb/hr)	0.602	0.565	0.538	0.505
CT Emission rate (lb/10^{12} Btu) (HHV)	234.7	235.0	234.9	234.8

Note: ppmvd= parts per million, volume dry; O2= oxygen.

Source: Siemens, 2008; CT Performance Data; Golder, 2008.

TABLE A-11A
HAZARDOUS AIR POLLUTANT EMISSIONS FOR ADDITIONAL RBEC EMISSION UNITS- NATURAL GAS-FIRING

	Auxiliary Boiler and Fuel Heater				Compressor Station		
	Emission Factor [a]		Annual Emission Basis		Emission Factor [a, b]		
Parameter/Pollutant	Units	Value	Auxiliary Boiler	Fuel Heater	Units	Value	Annual Emission Basis [c]
Number of Units			1	1			4
Heat Input Rate (MMBtu/hr)			99.77	10			40.4
Fuel use (scf/hr)			94,569	9,479			39,648
Hours of operation (annual)			500	8,760			8,760
Heat Input Rate (MMBtu/yr)			NA	NA			354,265
Fuel use (MMscf/yr)			47.284	83.03			347.32
HAPs [Section 112(b) of Clean Air Act]			Emissions (TPY)				Emissions (TPY)
Benzene	lb/10^6 scf	2.10E-03	4.96E-05	8.72E-05	lb/MMBtu	4.40E-04	3.90E-03
Formaldehyde	lb/10^6 scf	7.50E-02	1.77E-03	3.11E-03	lb/MMBtu	5.28E-02	4.68E-01
Naphthalene	lb/10^6 scf	6.10E-04	1.44E-05	2.53E-05	lb/MMBtu	7.44E-05	6.59E-04
Toluene	lb/10^6 scf	3.40E-03	8.04E-05	1.41E-04	lb/MMBtu	4.08E-04	3.61E-03
Dichlorobenzene	lb/10^6 scf	1.20E-03	2.84E-05	4.98E-05	lb/MMBtu	NA	NA
Acenaphthene	lb/10^6 scf	1.80E-06	4.26E-08	7.47E-08	lb/MMBtu	1.25E-06	1.11E-05
Acenaphthylene	lb/10^6 scf	1.80E-06	4.26E-08	7.47E-08	lb/MMBtu	5.53E-06	4.90E-05
Acetaldehyde	lb/10^6 scf	NA	NA	NA	lb/MMBtu	8.36E-03	7.40E-02
Acrolein	lb/10^6 scf	NA	NA	NA	lb/MMBtu	5.14E-03	4.55E-02
Anthracene	lb/10^6 scf	2.40E-06	5.67E-08	9.96E-08	lb/MMBtu	NA	NA
Benzo(a)anthracene	lb/10^6 scf	1.80E-06	4.26E-08	7.47E-08	lb/MMBtu	NA	NA
Benzo(b)fluoranthene	lb/10^6 scf	NA	NA	NA	lb/MMBtu	1.66E-07	1.47E-06
Benzene	lb/10^6 scf	2.10E-03	4.96E-05	8.72E-05	lb/MMBtu	NA	NA
Benzo(e)pyrene	lb/10^6 scf	NA	NA	NA	lb/MMBtu	4.15E-07	3.68E-06
Benzo(g,h,i)perylene	lb/10^6 scf	1.20E-06	2.84E-08	4.98E-08	lb/MMBtu	4.14E-07	3.67E-06
Biphenyl	lb/10^6 scf	NA	NA	NA	lb/MMBtu	2.12E-04	1.88E-03
Chrysene	lb/10^6 scf	1.80E-06	4.26E-08	7.47E-08	lb/MMBtu	6.93E-07	6.14E-06
Dibenzo(a,h)anthracene	lb/10^6 scf	1.20E-06	2.84E-08	4.98E-08	lb/MMBtu	NA	NA
Ethylbenzene	lb/10^6 scf	NA	NA	NA	lb/MMBtu	3.97E-05	3.52E-04
Fluoanthene	lb/10^6 scf	3.00E-06	7.09E-08	1.25E-07	lb/MMBtu	1.11E-06	9.83E-06
Fluorene	lb/10^6 scf	2.80E-06	6.62E-08	1.16E-07	lb/MMBtu	5.67E-06	5.02E-05
Indeno(1,2,3-cd)pyrene	lb/10^6 scf	1.80E-06	4.26E-08	7.47E-08	lb/MMBtu	NA	NA
Methanol	lb/10^6 scf	NA	NA	NA	lb/MMBtu	2.50E-03	2.21E-02
Methylcyclohexane	lb/10^6 scf	NA	NA	NA	lb/MMBtu	1.23E-03	1.09E-02
Methylene Chloride	lb/10^6 scf	NA	NA	NA	lb/MMBtu	2.00E-05	1.77E-04
n-Hexane	lb/10^6 scf	NA	NA	NA	lb/MMBtu	1.11E-03	9.83E-03
Phenanthrene	lb/10^6 scf	1.70E-05	4.02E-07	7.06E-07	lb/MMBtu	1.04E-05	9.21E-05
Phenol	lb/10^6 scf	NA	NA	NA	lb/MMBtu	2.40E-05	2.13E-04
Pyrene	lb/10^6 scf	5.00E-06	1.18E-07	2.08E-07	lb/MMBtu	1.36E-06	1.20E-05
Vinyl Chloride	lb/10^6 scf	NA	NA	NA	lb/MMBtu	1.49E-05	1.32E-04
Xylene	lb/10^6 scf	NA	NA	NA	lb/MMBtu	1.84E-04	1.63E-03
1,2,4 Trimethylbenzene	lb/10^6 scf	NA	NA	NA	lb/MMBtu	1.43E-05	1.27E-04
2-Methylnaphthalene	lb/10^6 scf	NA	NA	NA	lb/MMBtu	3.32E-05	2.94E-04
2,2,4-Trimethylpentane	lb/10^6 scf	NA	NA	NA	lb/MMBtu	2.50E-04	2.21E-03
Arsenic	lb/10^6 scf	2.00E-04	4.73E-06	8.30E-06	lb/10^6 scf	2.00E-04	3.47E-05
Beryllium	lb/10^6 scf	1.20E-05	2.84E-07	4.98E-07	lb/10^6 scf	1.20E-05	2.08E-06
Cadmium	lb/10^6 scf	1.10E-03	2.60E-05	4.57E-05	lb/10^6 scf	1.10E-03	1.91E-04
Chromium	lb/10^6 scf	1.40E-03	3.31E-05	5.81E-05	lb/10^6 scf	1.40E-03	2.43E-04
Cobalt	lb/10^6 scf	8.40E-05	1.99E-06	3.49E-06	lb/10^6 scf	8.40E-05	1.46E-05
Mercury	lb/10^6 scf	2.60E-04	6.15E-06	1.08E-05	lb/10^6 scf	2.60E-04	4.52E-05
Manganese	lb/10^6 scf	3.80E-04	8.98E-06	1.58E-05	lb/10^6 scf	3.80E-04	6.60E-05
Nickel	lb/10^6 scf	2.10E-03	4.96E-05	8.72E-05	lb/10^6 scf	2.10E-03	3.65E-04
Selenium	lb/10^6 scf	2.40E-05	5.67E-07	9.96E-07	lb/10^6 scf	2.40E-05	4.17E-06
HAPs (Total)			2.13E-03	3.74E-03			0.65

[a] EPA AP-42 (Section 1.4); for compression station, emission factors apply to metals.

[b] EPA AP-42 (Section 3.2)

[c] Compressor Station includes 7 gas-fired engines rated at 1,340 hp each.
Assumes control efficiency of organic HAPs with oxidation catalyst of: 95 percent.

TABLE A-11B
HAZARDOUS AIR POLLUTANT EMISSIONS FOR ADDITIONAL CCEC EMISSION UNITS- OIL-FIRING

Parameter/Pollutant	Emission Factor [a, b] Units	Value	Fire Pump Engine Annual Emission Basis	Emergency Generators [c] Annual Emission Basis
Heat Input Rate (MMBtu/hr)			2.32	42.0
Hours of operation (annual)			80	160
Heat Input Rate (MMBtu/yr)			185.9	6,723
HAPs [Section 112(b) of Clean Air Act]			Emissions (TPY)	
Acrolein	lb/MMBtu	7.88E-06	7.32E-07	2.65E-05
Acetaldehyde	lb/MMBtu	2.52E-05	2.34E-06	8.47E-05
Benzene	lb/MMBtu	7.76E-04	7.21E-05	2.61E-03
Formaldehyde	lb/MMBtu	7.89E-05	7.33E-06	2.65E-04
Naphthalene	lb/MMBtu	1.30E-04	1.21E-05	4.37E-04
Toluene	lb/MMBtu	2.81E-04	2.61E-05	9.45E-04
Xylene	lb/MMBtu	1.93E-04	1.79E-05	6.49E-04
Acenaphthene	lb/MMBtu	4.68E-06	4.35E-07	1.57E-05
Acenaphthylene	lb/MMBtu	9.23E-06	8.58E-07	3.10E-05
Anthracene	lb/MMBtu	1.23E-06	1.14E-07	4.13E-06
Benzo(a)anthracene	lb/MMBtu	6.22E-07	5.78E-08	2.09E-06
Benzo(b)fluoranthene	lb/MMBtu	1.11E-06	1.03E-07	3.73E-06
Benzo(k)fluoranthene	lb/MMBtu	2.18E-07	2.03E-08	7.33E-07
Benzo(g,h,i)perylene	lb/MMBtu	5.56E-07	5.17E-08	1.87E-06
Benzo(a)pyrene	lb/MMBtu	2.57E-07	2.39E-08	8.64E-07
Chrysene	lb/MMBtu	1.53E-06	1.42E-07	5.14E-06
Dibenzo(a,h)anthracene	lb/MMBtu	3.46E-07	3.22E-08	1.16E-06
Fluoanthene	lb/MMBtu	4.03E-06	3.75E-07	1.35E-05
Fluorene	lb/MMBtu	4.47E-06	4.15E-07	1.50E-05
Indo(1,2,3-cd)pyrene	lb/MMBtu	4.14E-07	3.85E-08	1.39E-06
Phenanthrene	lb/MMBtu	1.05E-06	9.76E-08	3.53E-06
Pyrene	lb/MMBtu	3.71E-06	3.45E-07	1.25E-05
Arsenic	lb/10^{12} Btu	4.0	3.72E-07	1.34E-05
Beryllium	lb/10^{12} Btu	3.0	2.79E-07	1.01E-05
Cadmium	lb/10^{12} Btu	3.0	2.79E-07	1.01E-05
Chromium	lb/10^{12} Btu	3.0	2.79E-07	1.01E-05
Lead	lb/10^{12} Btu	9.0	8.37E-07	3.03E-05
Mercury	lb/10^{12} Btu	3.0	2.79E-07	1.01E-05
Manganese	lb/10^{12} Btu	6.0	5.58E-07	2.02E-05
Nickel	lb/10^{12} Btu	3.0	2.79E-07	1.01E-05
Selenium	lb/10^{12} Btu	15.0	1.39E-06	5.04E-05
HAPs (Total)			1.43E-04	5.18E-03

[a] EPA AP-42 (Section 3.4)

[b] EPA AP-42 (Section 1.3) for metals.

[c] Includes two emergency generators.

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	150,000 BBL - No. 2 Fuel Oil, Palm Beach
City:	Palm Beach
State:	Florida
Company:	
Type of Tank:	Vertical Fixed Roof Tank
Description:	

Tank Dimensions

Shell Height (ft):	64.00
Diameter (ft):	130.00
Liquid Height (ft) :	64.00
Avg. Liquid Height (ft):	64.00
Volume (gallons):	6,300,000.00
Turnovers:	8.18
Net Throughput(gal/yr):	52,000,000.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition	Good
Roof Color/Shade:	Gray/Light
Roof Condition:	Good

Roof Characteristics

Type:	Dome
Height (ft)	0.00
Radius (ft) (Dome Roof)	65.00

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Miami, Florida (Avg Atmospheric Pressure = 14.75 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

150,000 BBL - No. 2 Fuel Oil, Palm Beach - Vertical Fixed Roof Tank
Palm Beach, Florida

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	83.70	75.41	92.00	78.13	0.0135	0.0106	0.0172	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

150,000 BBL - No. 2 Fuel Oil, Palm Beach - Vertical Fixed Roof Tank
Palm Beach, Florida

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	2,169.92	3,515.56	5,685.48

APPENDIX B

HISTORICAL ACTUAL EMISSIONS FROM EXISTING UNITS 3 AND 4 AT FPL RIVIERA PLANT

TABLE B-PRV-AOR
SUMMARY OF MAXIMUM ANNUAL EMISSIONS FOR THE EXISTING UNITS AT PRV USING AOR DATA

Pollutant		Annual Emissions (tons/year) 2007	2006	2005	2004	2003	Maximum 2-Year Average (tons/year)	2-Year Average Annual Emissions (tons/year) 2006 2007	2005 2006	2004 2005	2003 2004
SO_2	3	2,741.9	3,335.5	5,415.0	5,837.2	4,169.3		3,038.7	4,375.2	5,626.1	5,003.3
	4	2,815.1	1,903.4	4,815.0	5,572.5	6,419.3		2,359.3	3,359.2	5,193.7	5,995.9
		5,557.0	5,238.9	10,229.9	11,409.7	10,588.6	10,999.2	5,398.0	7,734.4	10,819.8	10,999.2
PM	3	227.6	281.5	436.9	471.8	335.9		254.5	359.2	454.4	403.9
	4	249.3	179.1	388.8	451.4	519.4		214.2	283.9	420.1	485.4
		476.9	460.5	825.7	923.2	855.3	889.3	468.7	643.1	874.5	889.3
PM_{10}	3	227.6	281.5	436.9	471.8	335.9		254.5	359.2	454.4	403.9
	4	249.3	179.1	388.8	451.4	519.4		214.2	283.9	420.1	485.4
		476.9	460.5	825.7	923.2	855.3	889.3	468.7	643.1	874.5	889.3
NO_x	3	877.4	1,524.4	1,762.2	1,928.7	1,424.0		1,200.9	1,643.3	1,845.5	1,676.3
	4	1,191.2	1,553.2	1,577.9	1,878.8	2,273.3		1,372.2	1,565.6	1,728.4	2,076.1
		2,068.6	3,077.6	3,340.1	3,807.5	3,697.3	3,752.4	2,573.1	3,208.9	3,573.8	3,752.4
CO	3	173.5	247.2	191.2	214.8	178.1		210.4	219.2	203.0	196.5
	4	352.5	346.2	173.3	216.3	298.4		349.4	259.8	194.8	257.4
		526.0	593.4	364.5	431.1	476.5	559.7	559.7	479.0	397.8	453.8
VOC (as methane)	3	19.4	22.6	28.6	31.0	22.4		21.0	25.6	29.8	26.7
	4	31.3	20.7	25.6	30.0	35.4		26.0	23.2	27.8	32.7
		50.7	43.3	54.2	60.9	57.8	59.4	47.0	48.8	57.6	59.4
Lead	3	0.033	0.043	0.056	0.061	0.044		0.038	0.050	0.059	0.053
	4	0.044	0.037	0.050	0.059	0.069		0.041	0.044	0.055	0.064
		0.077	0.080	0.106	0.120	0.113	0.117	0.079	0.093	0.113	0.117
SAM [a]	3	121.9	148.3	240.8	259.6	185.4		135.1	194.6	250.2	222.5
	4	125.2	84.7	214.1	247.8	285.5		104.9	149.4	231.0	266.7
		247.1	233.0	455.0	507.4	470.9	489.2	240.1	344.0	481.2	489.2

[a] Estimated from SO_2 emissions and based on ratio of AP-42 emission factors for fuel oil combustion (Table 1.3-1) for SO_3 and SO_2. SO_3 is assumed to be converted to H_2SO_4.

SO_3 emission factor	5.7 S lb/1000 gal (S = sulfur content)
SO_2 emission factor	157 S lb/1000 gal (S = sulfur content)
Ratio SO_3/SO_2 emissions	0.036 fraction
SO_3 molecular wgt (MW)	80
H_2SO_4 MW	98
Ratio H_2SO_4/SO_2 MW	1.225
Ratio H_2SO_4/SO_2 emissions	0.044

Source: FPL, 2008.

APPENDIX C

COMPARISON OF MODEL RESULTS USING LAND USE VALUES FROM THE SITE AND KPBI AIRPORT

Note:

- **GENGAS file has impacts based on surface characteristics from KPBI.**
- **GENGASON file has impacts based on surface characteristics from RBEC Site.**
- **Results are presented first with impacts from GENGAS file and second with impacts from GENGASON file for each source group and averaging period.**

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :GENGAS.O03
AERMOD OUTPUT FILE NUMBER 2 :GENGASON.O03
First title for last output file is: 2003 RBEC- CT LOAD ANALYSIS, SIEMENS GAS 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

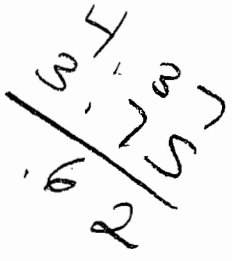
AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: G1095D					
Annual					
	2003	0.56705	593700.	2961200.	03123124
	2003	0.37393	593600.	2961300.	03123124
HIGH 24-Hour					
	2003	3.39174	593600.	2961200.	03061624
	2003	3.60867	594700.	2960000.	03012424
HIGH 8-Hour					
	2003	7.01136	593600.	2961200.	03062916
	2003	6.62667	594600.	2961200.	03031816
HIGH 3-Hour					
	2003	8.11788	593500.	2960700.	03022412
	2003	8.31635	594800.	2960600.	03041003
HIGH 1-Hour					
	2003	12.64923	593300.	2961000.	03120323
	2003	17.30613	594500.	2961200.	03052904
SOURCE GROUP ID: G1059D					
Annual					
	2003	0.53170	593700.	2961200.	03123124
	2003	0.34832	593600.	2961300.	03123124
HIGH 24-Hour					
	2003	3.18742	593600.	2961200.	03061624
	2003	3.25816	594800.	2959900.	03012424
HIGH 8-Hour					
	2003	6.64073	593600.	2961200.	03062916
	2003	6.23338	594700.	2961200.	03031816
HIGH 3-Hour					
	2003	7.64515	593500.	2960700.	03022412
	2003	7.45404	594800.	2961100.	03062112
HIGH 1-Hour					
	2003	11.63569	593300.	2961000.	03120323
	2003	16.37741	594500.	2961200.	03052904
SOURCE GROUP ID: G1035D					
Annual					
	2003	0.51177	593600.	2961200.	03123124
	2003	0.33323	593600.	2961300.	03123124
HIGH 24-Hour					
	2003	3.06621	593600.	2961200.	03061624
	2003	3.09892	594800.	2959900.	03012424
HIGH 8-Hour					
	2003	6.41707	593600.	2961200.	03062916
	2003	6.01140	594700.	2961200.	03031816
HIGH 3-Hour					
	2003	7.36272	593500.	2960700.	03022412
	2003	7.20318	594800.	2961100.	03062112
HIGH 1-Hour					
	2003	11.01839	593300.	2961000.	03120323
	2003	15.80567	594500.	2961200.	03052904
SOURCE GROUP ID: G7595					
Annual					
	2003	0.66511	593700.	2961200.	03123124
	2003	0.44364	593600.	2961300.	03123124
HIGH 24-Hour					
	2003	3.93100	593600.	2961200.	03061624
	2003	4.81193	594700.	2960100.	03012424
HIGH 8-Hour					
	2003	8.18164	593700.	2961100.	03062916
	2003	7.85825	594700.	2960700.	03041016
HIGH 3-Hour					
	2003	9.75547	593600.	2960700.	03022412
	2003	10.74934	594800.	2960600.	03041003
HIGH 1-Hour					
	2003	15.11463	593300.	2961000.	03120323

top - met site

	2003	20.31421	594400.	2961100.	03052904
SOURCE GROUP ID:	G7559				
Annual					
	2003	0.63152	593700.	2961200.	03123124
	2003	0.42026	593600.	2961300.	03123124
HIGH 24-Hour					
	2003	3.75105	593600.	2961200.	03061624
	2003	4.37957	594700.	2960100.	03012424
HIGH 8-Hour					
	2003	7.72391	593700.	2961100.	03062916
	2003	7.38757	594600.	2961200.	03031816
HIGH 3-Hour					
	2003	9.05741	593600.	2960700.	03022412
	2003	9.95472	594800.	2960600.	03041003
HIGH 1-Hour					
	2003	14.33739	593300.	2961000.	03120323
	2003	18.95294	594400.	2961100.	03052904
SOURCE GROUP ID:	G7535				
Annual					
	2003	0.61378	593700.	2961200.	03123124
	2003	0.40779	593600.	2961300.	03123124
HIGH 24-Hour					
	2003	3.65540	593600.	2961200.	03061624
	2003	4.14469	594700.	2960100.	03012424
HIGH 8-Hour					
	2003	7.50826	593700.	2961100.	03062916
	2003	7.18688	594600.	2961200.	03031816
HIGH 3-Hour					
	2003	8.74283	593600.	2960700.	03022412
	2003	9.50817	594800.	2960600.	03041003
HIGH 1-Hour					
	2003	13.88954	593300.	2961000.	03120323
	2003	18.40696	594500.	2961200.	03052904

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00



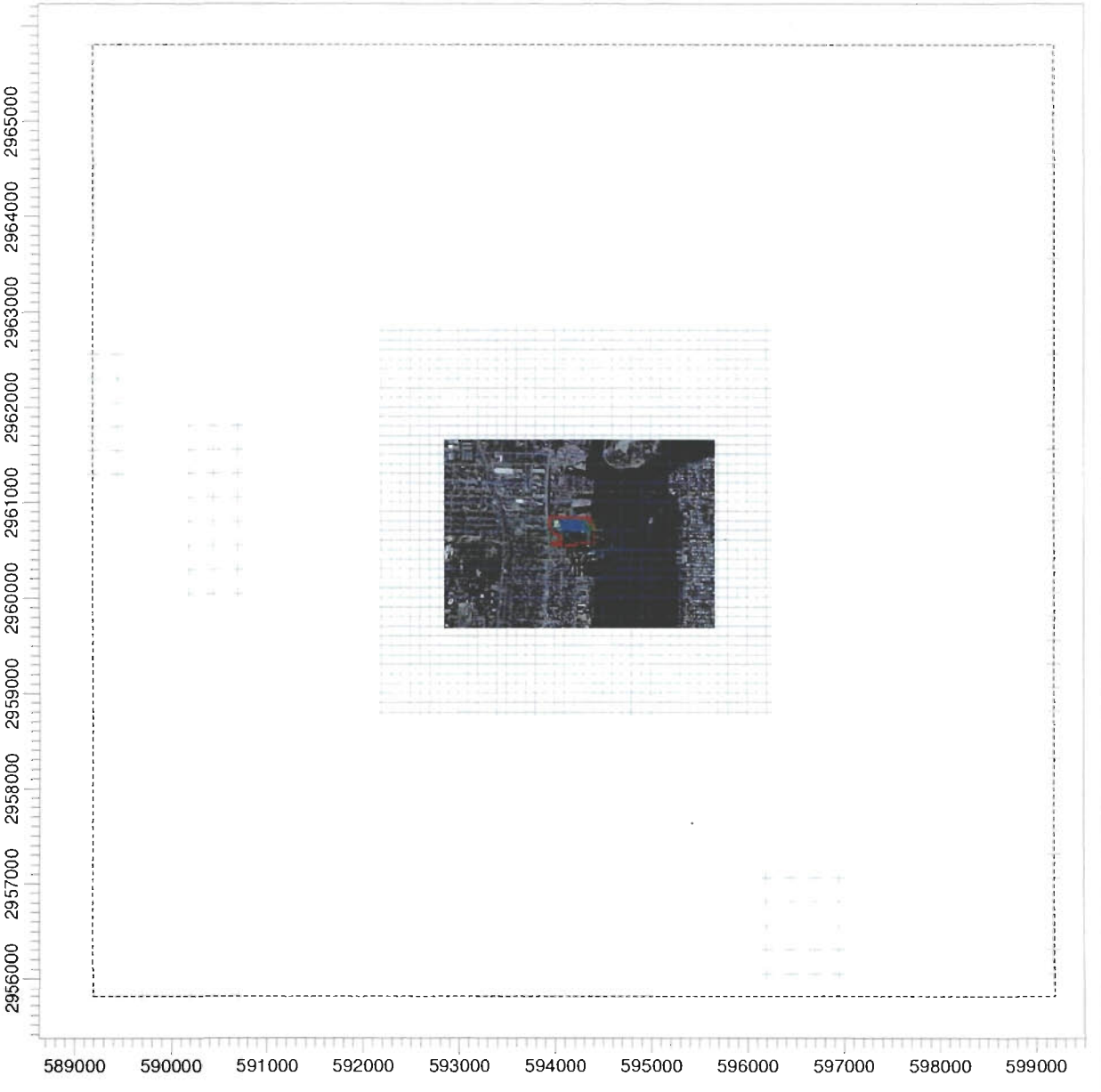
24/hr

APPENDIX D

RECEPTOR LOCATION FIGURES AND PROFILE INPUT PROGRAM (BPIP) FILES

PROJECT TITLE:

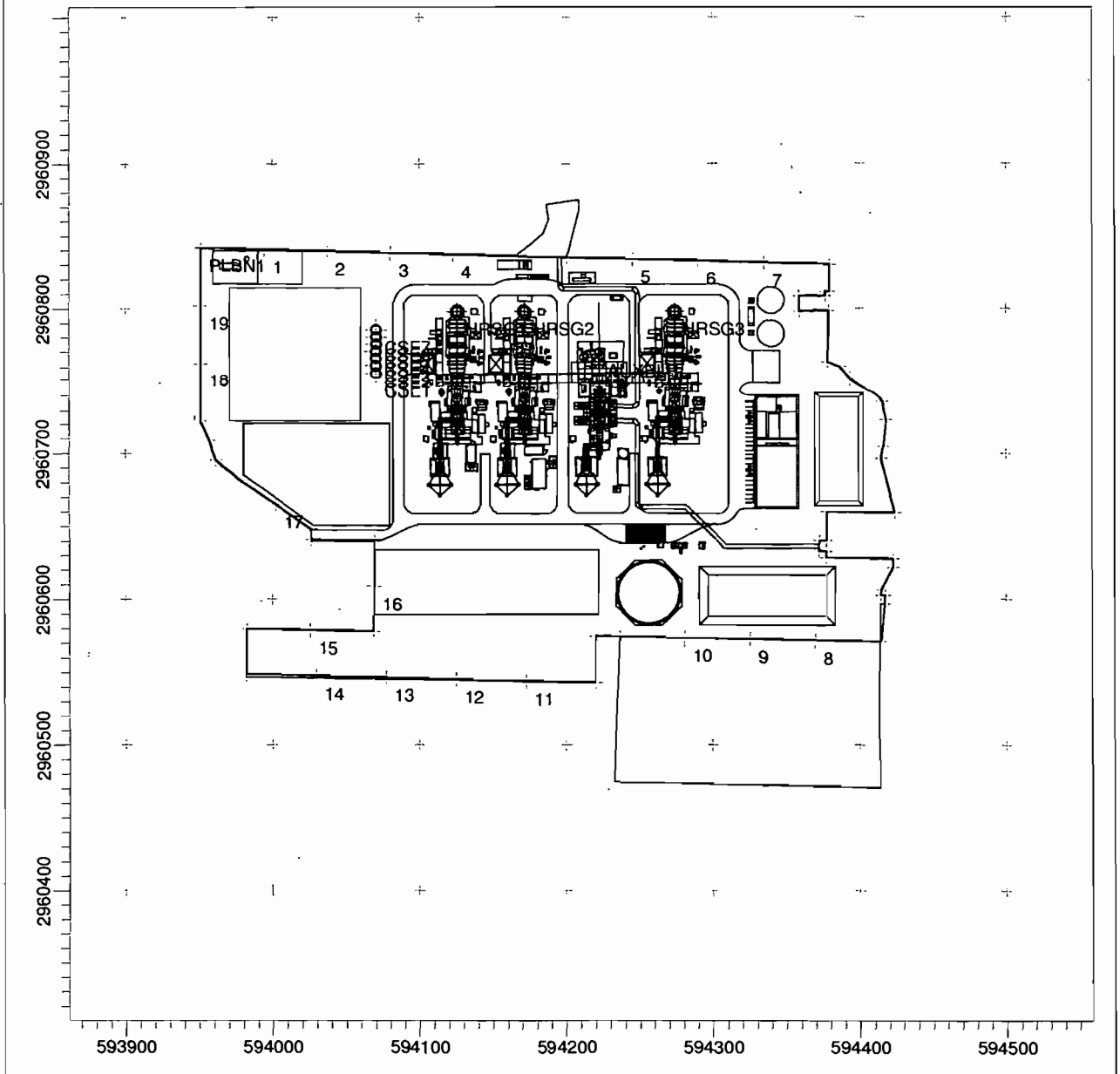
Figure D-1
General Receptor Grid for RBEC



COMMENTS:	SOURCES: **12**		
	RECEPTORS: 980 **3124**		
		SCALE: 1:66,351 0 2 km	
			PROJECT NO.:

PROJECT TITLE:

Figure D-2
Detailed Receptor Grid in the Vicinity of RBEC



COMMENTS:	SOURCES: **12**	
	RECEPTORS: 980 **3124**	
	SCALE: 1:4,251 0 0.1 km	
		PROJECT NO.:

APPENDIX E

MODEL SUMMARY AND INPUT FILES

TABLE E-1A
MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED FOR RBEC IN GENERAL GRID
FOR ONE COMBUSTION TURBINE/HRSG, MPS 501G CLASS CT

	MAXIMUM EMISSION RATES (lb/hr)							MAXIMUM PREDICTED CONCENTRATIONS (µg/m³) [c]					
	BASELOAD [b]			75% LOAD				BASELOAD			75% LOAD		
POLLUTANT	35°F	59°F	95°F	35°F	59°F	95°F	Averaging Time	35°F	59°F	95°F	35°F	59°F	95°F
Natural Gas													
Generic (10 g/s)	79.37	79.37	79.37	79.37	79.37	79.37	Annual	0.541	0.561	0.594	0.655	0.670	0.696
							24-Hour	2.994	3.152	3.439	4.020	4.172	4.443
							8-Hour	7.580	7.761	8.049	8.531	8.645	8.860
							3-Hour	10.543	10.905	11.442	11.563	11.730	12.061
							1-Hour	16.756	17.247	14.597	15.265	15.522	15.949
SO_2	18.3	17.6	16.6	12.1	11.5	10.6	Annual	0.1245	0.1248	0.1245	0.0996	0.0970	0.0931
							24-Hour	0.690	0.701	0.720	0.611	0.604	0.595
							3-Hour	2.43	2.42	2.40	1.76	1.70	1.61
PM_{10}	11.7	11.0	10.5	6.2	6.0	5.8	Annual	0.0797	0.0780	0.0783	0.0509	0.0507	0.0507
							24-Hour	0.441	0.438	0.453	0.312	0.316	0.324
NO_x/ NO_2	23.6	22.8	21.5	15.5	14.8	13.7	Annual	0.161	0.161	0.161	0.128	0.125	0.120
CO	54.5	52.7	50.3	48.0	45.5	42.0	8-Hour	5.21	5.15	5.10	5.16	4.96	4.69
							1-Hour	11.52	11.44	9.24	9.23	8.90	8.44
Fuel Oil													
Generic (10 g/s)	79.37	79.37	79.37	79.37	79.37	79.37	Annual	0.259	0.273	0.296	0.275	0.287	0.307
							24-Hour	1.713	1.777	1.894	1.783	1.837	1.948
							8-Hour	5.097	5.283	5.607	5.302	5.461	5.722
							3-Hour	7.615	7.855	8.027	7.872	7.877	8.148
							1-Hour	11.397	11.769	12.686	11.803	12.251	13.015
SO_2	3.8	3.6	3.2	3.0	2.8	2.6	Annual	0.0124	0.0123	0.0121	0.0103	0.0102	0.0100
							24-Hour	0.082	0.080	0.077	0.067	0.065	0.063
							3-Hour	0.364	0.353	0.328	0.294	0.280	0.265
PM_{10}	38.8	36.7	33.4	37.7	36.1	33.3	Annual	0.126	0.126	0.125	0.131	0.131	0.129
							24-Hour	0.84	0.82	0.80	0.85	0.84	0.82
NO_x/ NO_2	77.1	72.6	65.9	60.0	57.0	52.5	Annual	0.252	0.250	0.246	0.208	0.206	0.203
CO	47.0	44.2	40.1	228.3	217.0	200.0	8-Hour	3.02	2.94	2.83	15.25	14.93	14.42
							1-Hour	6.75	6.55	6.41	33.95	33.50	32.80

[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively.

Pollutant concentrations were based on a modeled or generic concentration predicted using a modeled emission rate of 79.37 lb/hr (10 g/s) for the combined cycle unit. Specific pollutant concentrations were estimated by multiplying the modeled concentration (at 10 g/s) by the ratio of the specific pollutant emission rate to the modeled emission rate of 10 g/s.

[b] Duct firing included at 100 % operating load. Duct firing based on natural gas-fired duct burner with maximum heat input rate of 475 MMBtu/hr (HHV).

[c] Based on Siemens H CT operating data which has lowest exit gas velocities among the CT vendors.

TABLE E-1B
MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED FOR RBEC AT PALM BEACH HOUSE
FOR ONE COMBUSTION TURBINE/HRSG, MPS 501G CLASS CT

	MAXIMUM EMISSION RATES (lb/hr)							MAXIMUM PREDICTED CONCENTRATIONS ($\mu g/m^3$) [c]					
	BASELOAD [b]			75% LOAD				BASELOAD			75% LOAD		
POLLUTANT	35°F	59°F	95°F	35°F	59°F	95°F	Averaging Time	35°F	59°F	95°F	35°F	59°F	95°F
Natural Gas Generic (10 g/s)	79.37	79.37	79.37	79.37	79.37	79.37	Annual	1.305	1.375	1.486	1.697	1.747	1.837
							24-Hour	14.284	15.064	16.298	18.629	19.172	20.165
							8-Hour	36.690	38.951	42.549	49.648	51.341	54.365
							3-Hour	60.133	64.116	70.389	82.365	85.084	89.920
							1-Hour	97.992	104.544	114.695	133.714	137.859	145.179
SO_2	18.3	17.6	16.6	12.1	11.5	10.6	Annual	0.3007	0.3057	0.3112	0.2580	0.2531	0.2459
							24-Hour	3.290	3.349	3.414	2.832	2.777	2.699
							3-Hour	13.85	14.25	14.74	12.52	12.32	12.04
PM_{10}	11.7	11.0	10.5	6.2	6.0	5.8	Annual	0.1924	0.1911	0.1959	0.1317	0.1323	0.1339
							24-Hour	2.105	2.094	2.149	1.446	1.452	1.469
NO_x/ NO_2	23.6	22.8	21.5	15.5	14.8	13.7	Annual	0.388	0.394	0.402	0.332	0.326	0.318
CO	54.5	52.7	50.3	48.0	45.5	42.0	8-Hour	25.22	25.84	26.95	30.03	29.43	28.77
							1-Hour	67.35	69.36	72.64	80.87	79.03	76.83
Fuel Oil Generic (10 g/s)	79.37	79.37	79.37	79.37	79.37	79.37	Annual	0.472	0.505	0.563	0.512	0.540	0.589
							24-Hour	5.341	5.506	5.804	5.529	5.674	6.031
							8-Hour	10.734	11.222	12.752	11.402	12.162	13.507
							3-Hour	15.959	17.034	19.386	17.329	18.491	20.549
							1-Hour	23.955	25.973	29.552	26.411	28.177	31.284
SO_2	3.8	3.6	3.2	3.0	2.8	2.6	Annual	0.0226	0.0227	0.0230	0.0191	0.0192	0.0192
							24-Hour	0.255	0.248	0.237	0.206	0.202	0.196
							3-Hour	0.763	0.766	0.792	0.647	0.657	0.669
PM_{10}	38.8	36.7	33.4	37.7	36.1	33.3	Annual	0.231	0.234	0.237	0.243	0.246	0.247
							24-Hour	2.61	2.55	2.45	2.62	2.58	2.53
NO_x/ NO_2	77.1	72.6	65.9	60.0	57.0	52.5	Annual	0.459	0.462	0.467	0.387	0.388	0.390
CO	47.0	44.2	40.1	228.3	217.0	200.0	8-Hour	6.36	6.25	6.45	32.80	33.25	34.04
							1-Hour	14.19	14.46	14.94	75.98	77.04	78.84

[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively.

Pollutant concentrations were based on a modeled or generic concentration predicted using a modeled emission rate of 79.37 lb/hr (10 g/s) for the combined cycle unit. Specific pollutant concentrations were estimated by multiplying the modeled concentration (at 10 g/s) by the ratio of the specific pollutant emission rate to the modeled emission rate of 10 g/s.

[b] Duct firing included at 100 % operating load. Duct firing based on natural gas-fired duct burner with maximum heat input rate of 475 MMBtu/hr (HHV).

[c] Based on Siemens H CT operating data which has lowest exit gas velocities among the CT vendors.

TABLE E-1C
MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED FOR THE RBEC IN GENERAL GRID FOR ONE COMBUSTION TURBINE/HRSG, SIEMENS H CT

	MAXIMUM EMISSION RATES (lb/hr)							MAXIMUM PREDICTED CONCENTRATIONS ($\mu g/m^3$) [c]					
	BASELOAD [b]			75% LOAD			Averaging	BASELOAD			75% LOAD		
POLLUTANT	35°F	59°F	95°F	35°F	59°F	95°F	Time	35°F	59°F	95°F	35°F	59°F	95°F
Natural Gas													
Generic	79.37	79.37	79.37	79.37	79.37	79.37	Annual	0.554	0.577	0.616	0.667	0.687	0.724
(10 g/s)							24-Hour	3.097	3.288	3.638	4.139	4.342	4.719
							8-Hour	7.712	7.905	8.225	8.618	8.761	9.204
							3-Hour	10.784	11.164	11.018	11.698	11.942	12.364
							1-Hour	17.068	17.702	14.563	15.464	15.788	16.419
SO_2	15.0	14.0	13.0	12.0	11.0	10.0	Annual	0.1047	0.1018	0.1009	0.1009	0.0952	0.0913
							24-Hour	0.585	0.580	0.596	0.626	0.602	0.595
							3-Hour	2.04	1.97	1.80	1.77	1.66	1.56
PM_{10}	13.3	13.0	11.7	11.0	11.0	9.4	Annual	0.0932	0.0945	0.0907	0.0925	0.0952	0.0855
							24-Hour	0.521	0.539	0.536	0.574	0.602	0.557
NO_x/NO_2	20.0	19.1	17.6	16.1	15.0	13.5	Annual	0.140	0.139	0.137	0.135	0.130	0.123
CO	30.0	29.0	27.0	49.0	46.0	41.0	8-Hour	2.92	2.89	2.80	5.32	5.08	4.75
							1-Hour	6.45	6.47	4.95	9.55	9.15	8.48
Fuel Oil													
Generic	79.37	79.37	79.37	79.37	79.37	79.37	Annual	0.264	0.280	0.308	0.333	0.349	0.378
(10 g/s)							24-Hour	1.742	1.808	1.968	2.062	2.144	2.287
							8-Hour	5.180	5.375	5.780	6.041	6.276	6.679
							3-Hour	7.710	7.777	8.202	8.276	8.442	8.739
							1-Hour	11.489	12.017	13.154	13.969	14.449	15.259
SO_2	3.6	3.4	3.1	2.8	2.7	2.5	Annual	0.0120	0.0120	0.0120	0.0117	0.0119	0.0119
							24-Hour	0.079	0.077	0.077	0.073	0.073	0.072
							3-Hour	0.350	0.333	0.320	0.292	0.287	0.275
PM_{10}	30.0	30.0	30.0	30.0	30.0	30.0	Annual	0.100	0.106	0.117	0.126	0.132	0.143
							24-Hour	0.66	0.68	0.74	0.78	0.81	0.86
NO_x/NO_2	85.3	80.0	71.4	69.1	64.8	58.1	Annual	0.284	0.282	0.278	0.290	0.285	0.277
CO	65.0	61.0	54.0	53.0	49.0	44.0	8-Hour	4.24	4.13	3.93	4.03	3.87	3.70
							1-Hour	9.41	9.24	8.95	9.33	8.92	8.46

[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively.

Pollutant concentrations were based on a modeled or generic concentration predicted using a modeled emission rate of 79.37 lb/hr (10 g/s) for the combined cycle unit. Specific pollutant concentrations were estimated by multiplying the modeled concentration (at 10 g/s) by the ratio of the specific pollutant emission rate to the modeled emission rate of 10 g/s.

[b] Duct firing included at 100 % operating load. Duct firing based on natural gas-fired duct burner with maximum heat input rate of 475 MMBtu/hr (HHV).

[c] Based on Siemens H CT operating data which has lowest exit gas velocities among the CT vendors.

TABLE E-1D
MAXIMUM POLLUTANT CONCENTRATIONS PREDICTED FOR THE RBEC AT PALM BEACH HOUSE
FOR ONE COMBUSTION TURBINE/HRSG, SIEMENS H CT

	MAXIMUM EMISSION RATES (lb/hr)							MAXIMUM PREDICTED CONCENTRATIONS ($\mu g/m^3$) [c]					
	BASELOAD [b]			75% LOAD			Averaging	BASELOAD			75% LOAD		
POLLUTANT	35°F	59°F	95°F	35°F	59°F	95°F	Time	35°F	59°F	95°F	35°F	59°F	95°F
Natural Gas Generic (10 g/s)	79.37	79.37	79.37	79.37	79.37	79.37	Annual	1.349	1.426	1.559	1.741	1.809	1.940
							24-Hour	14.769	15.632	17.109	19.105	19.852	21.328
							8-Hour	38.092	40.601	44.934	51.226	53.589	58.124
							3-Hour	62.523	66.950	74.520	84.861	88.627	95.792
							1-Hour	101.848	109.102	121.291	137.651	143.418	154.309
SO_2	15.0	14.0	13.0	12.0	11.0	10.0	Annual	0.2550	0.2516	0.2554	0.2632	0.2507	0.2444
							24-Hour	2.791	2.757	2.802	2.889	2.751	2.687
							3-Hour	11.82	11.81	12.21	12.83	12.28	12.07
PM_{10}	13.3	13.0	11.7	11.0	11.0	9.4	Annual	0.2269	0.2336	0.2295	0.2413	0.2507	0.2291
							24-Hour	2.484	2.560	2.519	2.648	2.751	2.519
NO_x/ NO_2	20.0	19.1	17.6	16.1	15.0	13.5	Annual	0.340	0.344	0.346	0.353	0.343	0.330
CO	30.0	29.0	27.0	49.0	46.0	41.0	8-Hour	14.40	14.84	15.29	31.63	31.06	30.03
							1-Hour	38.50	39.87	41.26	84.99	83.13	79.72
Fuel Oil Generic (10 g/s)	79.37	79.37	79.37	79.37	79.37	79.37	Annual	0.485	0.522	0.593	0.654	0.694	0.769
							24-Hour	5.402	5.593	6.058	6.714	7.143	7.955
							8-Hour	10.925	11.639	13.569	15.276	16.412	18.608
							3-Hour	16.198	17.683	20.633	23.243	24.989	28.391
							1-Hour	24.700	26.963	31.430	35.331	37.937	42.996
SO_2	3.6	3.4	3.1	2.8	2.7	2.5	Annual	0.0220	0.0223	0.0231	0.0231	0.0236	0.0242
							24-Hour	0.245	0.240	0.237	0.237	0.243	0.251
							3-Hour	0.735	0.758	0.806	0.820	0.850	0.894
PM_{10}	30.0	30.0	30.0	30.0	30.0	30.0	Annual	0.183	0.197	0.224	0.247	0.262	0.291
							24-Hour	2.04	2.11	2.29	2.54	2.70	3.01
NO_x/ NO_2	85.3	80.0	71.4	69.1	64.8	58.1	Annual	0.521	0.526	0.533	0.570	0.566	0.563
CO	65.0	61.0	54.0	53.0	49.0	44.0	8-Hour	8.95	8.95	9.23	10.20	10.13	10.32
							1-Hour	20.23	20.72	21.39	23.59	23.42	23.84

[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively.

Pollutant concentrations were based on a modeled or generic concentration predicted using a modeled emission rate of 79.37 lb/hr (10 g/s) for the combined cycle unit. Specific pollutant concentrations were estimated by multiplying the modeled concentration (at 10 g/s) by the ratio of the specific pollutant emission rate to the modeled emission rate of 10 g/s.

[b] Duct firing included at 100 % operating load. Duct firing based on natural gas-fired duct burner with maximum heat input rate of 475 MMBtu/hr (HHV).

[c] Based on Siemens H CT operating data which has lowest exit gas velocities among the CT vendors.

TABLE E-2A
MAXIMUM POLLUTANT CONCENTRATIONS
FOR THE CTS/HRSGS FOR RBEC IN GENERAL GRID
PREDICTED BY OPERATING LOAD AND AIR INLET TEMPERATURE

		MPS 501G Class						SIEMENS H					
	Averaging	100% Load			75% Load			100% Load			75% Load		
Pollutant	Time	35°F	59°F	95°F	35°F	59°F	95°F	35°F	59°F	95°F	35°F	59°F	95°F
Natural Gas Operation [b]													
SO_2	Annual	0.374	0.374	0.373	0.299	0.291	0.279	0.314	0.305	0.303	0.303	0.286	0.274
	24-Hour	2.07	2.10	2.16	1.83	1.81	1.78	1.76	1.74	1.79	1.88	1.81	1.78
	3-Hour	7.29	7.27	7.19	5.27	5.10	4.84	6.11	5.91	5.41	5.31	4.97	4.67
PM_{10}	Annual	0.239	0.234	0.235	0.153	0.152	0.152	0.280	0.283	0.272	0.277	0.286	0.257
	24-Hour	1.32	1.31	1.36	0.94	0.95	0.97	1.56	1.62	1.61	1.72	1.81	1.67
NO_2	Annual	0.482	0.483	0.482	0.385	0.375	0.361	0.419	0.417	0.410	0.406	0.391	0.370
CO	8-Hour	15.6	15.4	15.3	15.5	14.9	14.1	8.7	8.7	8.4	16.0	15.2	14.3
	1-Hour	34.5	34.3	27.7	27.7	26.7	25.3	19.4	19.4	14.9	28.6	27.5	25.4
Fuel Oil Operation													
SO_2	Annual	0.037	0.037	0.036	0.031	0.031	0.030	0.036	0.036	0.036	0.035	0.036	0.036
	24-Hour	0.25	0.24	0.23	0.20	0.20	0.19	0.237	0.232	0.231	0.218	0.219	0.216
	3-Hour	1.09	1.06	0.98	0.88	0.84	0.80	1.05	1.00	0.96	0.88	0.86	0.83
PM_{10}	Annual	0.379	0.379	0.375	0.392	0.392	0.386	0.299	0.317	0.350	0.378	0.396	0.429
	24-Hour	2.51	2.47	2.39	2.54	2.51	2.45	1.98	2.05	2.23	2.34	2.43	2.59
NO_2	Annual	0.755	0.749	0.739	0.625	0.618	0.609	0.852	0.845	0.833	0.870	0.854	0.831
CO	8-Hour	9.1	8.8	8.5	45.8	44.8	43.3	12.7	12.4	11.8	12.1	11.6	11.1
	1-Hour	20.2	19.7	19.2	102	100	98	28.2	27.7	26.8	28.0	26.8	25.4

Note: NA = not applicable

[a] Concentrations are based on highest concentrations predicted using five years of meteorological data from 2001 to 2005 of surface and upper air data from the National Weather Service stations at Daytona and Jacksonville International Airports, respectively.

[b] Duct firing included for 100 % operating load. Duct firing based on natural gas-fired duct burner with maximum heat input rate of 475 MMBtu/hr (HHV).

TABLE E-2B
MAXIMUM POLLUTANT CONCENTRATIONS
FOR THE CTS/HRSGS FOR RBEC AT PALM BEACH HOUSE
PREDICTED BY OPERATING LOAD AND AIR INLET TEMPERATURE

Pollutant	Averaging Time	MPS 501G Class						SIEMENS H					
		100% Load			75% Load			100% Load			75% Load		
		35°F	59°F	95°F	35°F	59°F	95°F	35°F	59°F	95°F	35°F	59°F	95°F
Natural Gas Operation [b]													
SO_2	Annual	0.301	0.306	0.311	0.258	0.253	0.246	0.255	0.252	0.255	0.263	0.251	0.244
	24-Hour	3.290	3.349	3.414	2.832	2.777	2.699	2.791	2.757	2.802	2.889	2.751	2.687
	3-Hour	13.852	14.254	14.744	12.522	12.322	12.037	11.817	11.810	12.206	12.831	12.284	12.070
PM_{10}	Annual	0.192	0.191	0.196	0.132	0.132	0.134	0.227	0.234	0.230	0.241	0.251	0.229
	24-Hour	2.105	2.094	2.149	1.446	1.452	1.469	2.484	2.560	2.519	2.648	2.751	2.519
NO_2	Annual	0.388	0.394	0.402	0.332	0.326	0.318	0.340	0.344	0.346	0.353	0.343	0.330
CO	8-Hour	25.217	25.843	26.947	30.027	29.434	28.770	14.399	14.835	15.286	31.627	31.060	30.027
	1-Hour	67.350	69.363	72.638	80.870	79.035	76.829	38.498	39.866	41.263	84.986	83.125	79.716
Fuel Oil Operation													
SO_2	Annual	0.023	0.023	0.023	0.019	0.019	0.019	0.022	0.022	0.023	0.023	0.024	0.024
	24-Hour	0.255	0.248	0.237	0.206	0.202	0.196	0.245	0.240	0.237	0.237	0.243	0.251
	3-Hour	0.763	0.766	0.792	0.647	0.657	0.669	0.735	0.758	0.806	0.820	0.850	0.894
PM_{10}	Annual	0.231	0.234	0.237	0.243	0.246	0.247	0.183	0.197	0.224	0.247	0.262	0.291
	24-Hour	2.611	2.548	2.446	2.625	2.584	2.529	2.042	2.114	2.290	2.538	2.700	3.007
NO_2	Annual	0.459	0.462	0.467	0.387	0.388	0.390	0.521	0.526	0.533	0.570	0.566	0.563
CO	8-Hour	6.356	6.247	6.446	32.801	33.253	34.037	8.948	8.945	9.232	10.201	10.133	10.316
	1-Hour	14.186	14.457	14.938	75.976	77.043	78.835	20.229	20.724	21.385	23.594	23.422	23.837

Note: NA = not applicable

[a] Concentrations are based on highest predicted concentrations from AERMOD using 5 years of meteorological data from 2001 to 2005 with surface and upper air data from the National Weather Service stations at Palm Beach and Miami International Airports, respectively.

[b] Duct firing included for 100 % operating load. Duct firing based on natural gas-fired duct burner with maximum heat input rate of 475 MMBtu/hr (HHV).

IMPACTS FOR PREDICTED DUCT BURNERS AND CTS/HRSGS, FIRING NATURAL GAS AND MODELED WITH 10 G/S EMISSION RATE

1. SUMMARY FILE
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :GENGASMP.O01
AERMOD OUTPUT FILE NUMBER 2 :GENGASMP.O02
AERMOD OUTPUT FILE NUMBER 3 :GENGASMP.O03
AERMOD OUTPUT FILE NUMBER 4 :GENGASMP.O04
AERMOD OUTPUT FILE NUMBER 5 :GENGASMP.O05
First title for last output file is: 2001 REBEC- CT LOAD ANALYSIS, MPS 501G1 PLUS GAS 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID:	G1095D				
Annual					
	2001	0.49392	593500.	2960900.	01123124
	2002	0.59426	593600.	2961100.	02123124
	2003	0.54759	593700.	2961200.	03123124
	2004	0.52738	593500.	2960900.	04123124
	2005	0.49437	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	3.43878	593300.	2960500.	01100924
	2002	2.72319	593500.	2961200.	02062024
	2003	3.27956	593600.	2961200.	03061624
	2004	2.92874	593700.	2961300.	04082624
	2005	3.08732	593500.	2961100.	05061024
HIGH 8-Hour					
	2001	6.94881	593500.	2960600.	01100916
	2002	6.37638	593700.	2961200.	02042816
	2003	6.80873	593600.	2961200.	03062916
	2004	8.04871	594600.	2961500.	04090508
	2005	7.79586	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	8.02632	593600.	2961100.	01072412
	2002	7.82606	593600.	2961200.	02072512
	2003	7.85697	593500.	2960700.	03022412
	2004	10.08589	594900.	2961000.	04092524
	2005	11.44181	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	9.86751	593500.	2961600.	01091406
	2002	8.86646	593600.	2961000.	02053111
	2003	12.09231	593300.	2961000.	03120323
	2004	14.59652	594700.	2960800.	04090421
	2005	12.32447	593400.	2961300.	05102404
SOURCE GROUP ID:	G1059D				
Annual					
	2001	0.46504	593500.	2960900.	01123124
	2002	0.56141	593600.	2961100.	02123124
	2003	0.51820	593600.	2961200.	03123124
	2004	0.49907	593500.	2960900.	04123124
	2005	0.46690	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	3.15221	593300.	2960500.	01100924
	2002	2.59027	593500.	2961200.	02062024
	2003	3.10557	593600.	2961200.	03061624
	2004	2.78529	593700.	2961300.	04082624
	2005	2.90975	593700.	2961400.	05070424
HIGH 8-Hour					
	2001	6.41004	593500.	2960600.	01100916
	2002	6.03830	593500.	2960900.	02091816
	2003	6.48873	593600.	2961200.	03062916
	2004	7.76107	594600.	2961500.	04090508
	2005	7.32867	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	7.56879	593600.	2961100.	01072412
	2002	7.44797	593600.	2961200.	02072512
	2003	7.45023	593500.	2960700.	03022412
	2004	9.77983	594900.	2961000.	04092524
	2005	10.90487	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	9.09454	593500.	2961600.	01091406
	2002	8.38924	593600.	2961000.	02053111
	2003	11.20251	593300.	2961000.	03120323

	2004	17.24737	594700.	2960600.	04092519
	2005	11.50434	593400.	2961300.	05102404
SOURCE GROUP ID:	G1035D				
Annual					
	2001	0.44673	593500.	2960900.	01123124
	2002	0.54060	593600.	2961100.	02123124
	2003	0.50007	593600.	2961200.	03123124
	2004	0.48116	593500.	2960900.	04123124
	2005	0.44966	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	2.98357	593300.	2960500.	01100924
	2002	2.50539	593500.	2961200.	02062024
	2003	2.99426	593600.	2961200.	03061624
	2004	2.69203	593700.	2961300.	04082624
	2005	2.81986	593700.	2961400.	05070424
HIGH 8-Hour					
	2001	6.13769	593300.	2960500.	01100916
	2002	5.83353	593500.	2960900.	02091816
	2003	6.28207	593600.	2961200.	03062916
	2004	7.57983	594600.	2961500.	04090508
	2005	7.02119	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	7.27756	593600.	2961100.	01072412
	2002	7.20309	593600.	2961200.	02072512
	2003	7.18893	593500.	2960700.	03022412
	2004	9.58152	594900.	2961000.	04092524
	2005	10.54333	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	8.59121	593500.	2961600.	01091406
	2002	8.08461	593600.	2961000.	02053111
	2003	10.62884	593200.	2961000.	03120323
	2004	16.75591	594800.	2960700.	04092520
	2005	12.14034	593500.	2961200.	05082521
SOURCE GROUP ID:	G7595				
Annual					
	2001	0.58846	593500.	2960800.	01123124
	2002	0.69583	593600.	2961100.	02123124
	2003	0.63937	593700.	2961200.	03123124
	2004	0.61708	593500.	2960900.	04123124
	2005	0.57967	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	4.44311	593300.	2960500.	01100924
	2002	3.24087	593700.	2961500.	02030224
	2003	3.79154	593600.	2961200.	03061624
	2004	3.61699	594300.	2961500.	04090524
	2005	3.91915	593300.	2961000.	05070824
HIGH 8-Hour					
	2001	8.76965	593500.	2960600.	01100916
	2002	7.66098	593800.	2961400.	02030216
	2003	7.82709	593700.	2961100.	03062916
	2004	8.86043	594500.	2961400.	04090508
	2005	8.59408	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	9.36591	593600.	2961100.	01072412
	2002	9.04918	593500.	2960800.	02120912
	2003	9.21974	593600.	2960700.	03022412
	2004	10.92890	594900.	2961000.	04092524
	2005	12.06108	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	11.33652	593200.	2960400.	01100918
	2002	10.26867	593600.	2961000.	02053111
	2003	14.55599	593300.	2961000.	03120323
	2004	15.94934	594000.	2960100.	04090406
	2005	13.48022	593400.	2960900.	05082519
SOURCE GROUP ID:	G7559				
Annual					
	2001	0.56349	593500.	2960800.	01123124
	2002	0.66982	593600.	2961100.	02123124
	2003	0.61601	593700.	2961200.	03123124
	2004	0.59375	593500.	2960900.	04123124
	2005	0.55792	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	4.17160	593300.	2960500.	01100924
	2002	3.06774	593700.	2961500.	02030224

	2003	3.66669	593600.	2961200.	03061624
	2004	3.40469	594400.	2961500.	04090524
	2005	3.69556	593300.	2961000.	05070824
HIGH 8-Hour					
	2001	8.29348	593500.	2960600.	01100916
	2002	7.27088	593700.	2961300.	02092516
	2003	7.53756	593700.	2961100.	03062916
	2004	8.64468	594600.	2961500.	04090508
	2005	8.29346	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	9.03776	593600.	2961100.	01072412
	2002	8.64934	593600.	2961200.	02072512
	2003	8.79309	593600.	2960700.	03022412
	2004	10.72269	594900.	2961000.	04092524
	2005	11.73046	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	10.71412	593200.	2960400.	01100918
	2002	9.92440	593600.	2961000.	02053111
	2003	13.96468	593300.	2961000.	03120323
	2004	15.52226	594000.	2960100.	04090406
	2005	14.04203	593800.	2961400.	05070906
SOURCE GROUP ID:	G7535				
Annual					
	2001	0.54939	593500.	2960800.	01123124
	2002	0.65517	593600.	2961100.	02123124
	2003	0.60280	593700.	2961200.	03123124
	2004	0.58065	593500.	2960900.	04123124
	2005	0.54555	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	4.01955	593300.	2960500.	01100924
	2002	2.97371	593600.	2961100.	02062024
	2003	3.59397	593600.	2961200.	03061624
	2004	3.29638	594400.	2961500.	04090524
	2005	3.56843	593300.	2961000.	05070824
HIGH 8-Hour					
	2001	8.01821	593500.	2960600.	01100916
	2002	7.07079	593700.	2961300.	02092516
	2003	7.38397	593700.	2961100.	03062916
	2004	8.53100	594600.	2961500.	04090508
	2005	8.12111	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	8.84675	593600.	2961100.	01072412
	2002	8.49650	593600.	2961200.	02072512
	2003	8.58829	593600.	2960700.	03022412
	2004	10.60092	594900.	2961000.	04092524
	2005	11.56279	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	11.39285	593600.	2961500.	01091406
	2002	9.72367	593600.	2961000.	02053111
	2003	13.61189	593300.	2961000.	03120323
	2004	15.26465	594000.	2960100.	04090406
	2005	13.70669	593700.	2961500.	05070906

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 REBEC- CT LOAD ANALYSIS, MPS 501G1 PLUS GAS 12/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
*****************************************
** ISCST3 Source Pathway
*****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION GA1095 POINT 594125.983 2960797.999 1.000
  LOCATION GB1095 POINT 594172.071 2960797.963 1.000
  LOCATION GC1095 POINT 594274.233 2960797.946 1.000

  LOCATION GA1059 POINT 594125.983 2960797.999 1.000
  LOCATION GB1059 POINT 594172.071 2960797.963 1.000
  LOCATION GC1059 POINT 594274.233 2960797.946 1.000

  LOCATION GA1035 POINT 594125.983 2960797.999 1.000
  LOCATION GB1035 POINT 594172.071 2960797.963 1.000
  LOCATION GC1035 POINT 594274.233 2960797.946 1.000

  LOCATION GA7595 POINT 594125.983 2960797.999 1.000
  LOCATION GB7595 POINT 594172.071 2960797.963 1.000
  LOCATION GC7595 POINT 594274.233 2960797.946 1.000

  LOCATION GA7559 POINT 594125.983 2960797.999 1.000
  LOCATION GB7559 POINT 594172.071 2960797.963 1.000
  LOCATION GC7559 POINT 594274.233 2960797.946 1.000

  LOCATION GA7535 POINT 594125.983 2960797.999 1.000
  LOCATION GB7535 POINT 594172.071 2960797.963 1.000
  LOCATION GC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F with duct firing
  SRCPARAM GA1095 3.3333  45.4  357.5  17.28 6.71
  SRCPARAM GB1095 3.3333  45.4  357.5  17.28 6.71
  SRCPARAM GC1095 3.3333  45.4  357.5  17.28 6.71
** Baseload, 59 F with duct firing
  SRCPARAM GA1059 3.3333  45.4  357.9  18.39 6.71
  SRCPARAM GB1059 3.3333  45.4  357.9  18.39 6.71
  SRCPARAM GC1059 3.3333  45.4  357.9  18.39 6.71
** Baseload, 35 F with duct firing
  SRCPARAM GA1035 3.3333  45.4  358.6  19.07 6.71
  SRCPARAM GB1035 3.3333  45.4  358.6  19.07 6.71
  SRCPARAM GC1035 3.3333  45.4  358.6  19.07 6.71
** 75% Load, 95 F
  SRCPARAM GA7595 3.3333  45.4  359.3  14.03 6.71
  SRCPARAM GB7595 3.3333  45.4  359.3  14.03 6.71
  SRCPARAM GC7595 3.3333  45.4  359.3  14.03 6.71
** 75% Load, 59 F
  SRCPARAM GA7559 3.3333  45.4  358.2  14.86 6.71
  SRCPARAM GB7559 3.3333  45.4  358.2  14.86 6.71
  SRCPARAM GC7559 3.3333  45.4  358.2  14.86 6.71
** 75% Load, 35 F
  SRCPARAM GA7535 3.3333  45.4  357.6  15.36 6.71
  SRCPARAM GB7535 3.3333  45.4  357.6  15.36 6.71
  SRCPARAM GC7535 3.3333  45.4  357.6  15.36 6.71

** Building Downwash **
SO BUILDHGT GA1035-GA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
```

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SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID GA1035-GA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GA1035-GA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GA1035-GA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GA1035-GA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GA1035-GA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GA1035-GA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN GA1035-GA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GA1035-GA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GA1035-GA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GA1035-GA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GA1035-GA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GA1035-GA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    GA1035-GA7595   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    GA1035-GA7595   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    GA1035-GA7595    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    GA1035-GA7595     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    GA1035-GA7595    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    GA1035-GA7595   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    GA1035-GA7595   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    GA1035-GA7595   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    GA1035-GA7595   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    GA1035-GA7595     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    GA1035-GA7595    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    GA1035-GA7595    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT GB1035-GB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID GB1035-GB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID GB1035-GB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GB1035-GB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GB1035-GB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GB1035-GB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GB1035-GB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN GB1035-GB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN GB1035-GB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GB1035-GB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GB1035-GB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GB1035-GB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GB1035-GB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    GB1035-GB7595   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    GB1035-GB7595   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    GB1035-GB7595    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    GB1035-GB7595     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    GB1035-GB7595    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    GB1035-GB7595   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    GB1035-GB7595   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    GB1035-GB7595    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    GB1035-GB7595   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    GB1035-GB7595     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    GB1035-GB7595     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    GB1035-GB7595    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT GC1035-GC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID GC1035-GC7595    18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID GC1035-GC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GC1035-GC7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GC1035-GC7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GC1035-GC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GC1035-GC7595    27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN GC1035-GC7595    10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN GC1035-GC7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GC1035-GC7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GC1035-GC7595    28.87  29.43  29.09  27.87  25.81  22.95
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SO BUILDLEN GC1035-GC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GC1035-GC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    GC1035-GC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    GC1035-GC7595   -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    GC1035-GC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    GC1035-GC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    GC1035-GC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    GC1035-GC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    GC1035-GC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    GC1035-GC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    GC1035-GC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    GC1035-GC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    GC1035-GC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    GC1035-GC7595     14.78  12.36   9.56   6.48  14.59   0.08

  SRCGROUP G1095D GA1095 GB1095 GC1095
  SRCGROUP G1059D GA1059 GB1059 GC1059
  SRCGROUP G1035D GA1035 GB1035 GC1035
  SRCGROUP G7595 GA7595 GB7595 GC7595
  SRCGROUP G7559 GA7559 GB7559 GC7559
  SRCGROUP G7535 GA7535 GB7535 GC7535

SO FINISHED
**
**********************************************
** ISCST3 Receptor Pathway
**********************************************
**
**
RE STARTING
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********************************************
** AERMOD Meteorology Pathway
**********************************************
**
**
ME STARTING
  SURFFILE C:\amodmet\PBIMIA01.SFC
  PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********************************************
** AERMOD Output Pathway
**********************************************
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENGMPCD.O01
AERMOD OUTPUT FILE NUMBER 2 :GENGMPCD.O02
AERMOD OUTPUT FILE NUMBER 3 :GENGMPCD.O03
AERMOD OUTPUT FILE NUMBER 4 :GENGMPCD.O04
AERMOD OUTPUT FILE NUMBER 5 :GENGMPCD.O05
First title for last output file is: 2001 REBEC- CT LOAD ANALYSIS, MPS 501G1 PLUS GAS CONDO 2/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: G1095D					
Annual					
	2001	0.92843	594330.	2960240.	01123124
	2002	1.06310	594330.	2960240.	02123124
	2003	1.08226	594330.	2960240.	03123124
	2004	1.01309	594330.	2960240.	04123124
	2005	1.48576	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	14.10366	594330.	2960240.	01110924
	2002	10.27351	594330.	2960240.	02112524
	2003	14.33516	594330.	2960240.	03090924
	2004	13.93435	594280.	2960240.	04101624
	2005	16.29827	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	40.29099	594330.	2960240.	01100308
	2002	26.09833	594330.	2960240.	02011908
	2003	30.31377	594280.	2960240.	03090924
	2004	41.29173	594280.	2960240.	04101624
	2005	42.54916	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	63.60485	594330.	2960240.	01091706
	2002	47.52190	594330.	2960240.	02010821
	2003	70.38879	594280.	2960240.	03111321
	2004	65.90333	594280.	2960240.	04101621
	2005	68.05148	594280.	2960240.	05102721
HIGH 1-Hour					
	2001	93.86166	594330.	2960240.	01082604
	2002	98.97216	594330.	2960240.	02040402
	2003	107.25648	594305.	2960240.	03091124
	2004	97.04092	594280.	2960240.	04101621
	2005	114.69453	594280.	2960240.	05072204
SOURCE GROUP ID: G1059D					
Annual					
	2001	0.85575	594330.	2960240.	01123124
	2002	0.98478	594330.	2960240.	02123124
	2003	1.00273	594330.	2960240.	03123124
	2004	0.94105	594330.	2960240.	04123124
	2005	1.37496	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	12.92035	594330.	2960240.	01110924
	2002	9.41884	594330.	2960240.	02112524
	2003	13.11292	594330.	2960240.	03090924
	2004	12.77831	594280.	2960240.	04101624
	2005	15.06422	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	36.70204	594330.	2960240.	01100308
	2002	23.89854	594330.	2960240.	02011908
	2003	27.66236	594305.	2960240.	03090924
	2004	37.71187	594280.	2960240.	04101624
	2005	38.95112	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	57.87738	594330.	2960240.	01091706
	2002	43.44948	594330.	2960240.	02010821
	2003	64.11589	594280.	2960240.	03111321
	2004	60.25204	594280.	2960240.	04101621
	2005	62.11363	594280.	2960240.	05102721
HIGH 1-Hour					
	2001	85.53506	594330.	2960240.	01082604
	2002	90.12915	594330.	2960240.	02040402

2003	97.72466	594305.	2960240.	03091124
2004	88.41019	594280.	2960240.	04101621
2005	104.54362	594280.	2960240.	05072204

SOURCE GROUP ID: G1035D

Annual

2001	0.81033	594330.	2960240.	01123124
2002	0.93566	594330.	2960240.	02123124
2003	0.95285	594330.	2960240.	03123124
2004	0.89583	594330.	2960240.	04123124
2005	1.30538	594330.	2960240.	05123124

HIGH 24-Hour

2001	12.17863	594330.	2960240.	01110924
2002	8.88254	594330.	2960240.	02112524
2003	12.33461	594330.	2960240.	03090924
2004	12.04681	594280.	2960240.	04101624
2005	14.28390	594330.	2960240.	05102824

HIGH 8-Hour

2001	34.44937	594330.	2960240.	01100308
2002	22.51916	594330.	2960240.	02011908
2003	25.97879	594305.	2960240.	03090924
2004	35.44889	594280.	2960240.	04101624
2005	36.69040	594280.	2960240.	05122324

HIGH 3-Hour

2001	54.25778	594330.	2960240.	01091706
2002	40.92045	594330.	2960240.	02010821
2003	60.13311	594280.	2960240.	03111321
2004	56.66740	594280.	2960240.	04101621
2005	58.35804	594280.	2960240.	05102721

HIGH 1-Hour

2001	80.19019	594330.	2960240.	01082604
2002	84.55088	594330.	2960240.	02040402
2003	91.62402	594305.	2960240.	03091124
2004	82.95583	594280.	2960240.	04101621
2005	97.99232	594280.	2960240.	05072204

SOURCE GROUP ID: G7595

Annual

2001	1.16074	594330.	2960240.	01123124
2002	1.31168	594330.	2960240.	02123124
2003	1.33466	594330.	2960240.	03123124
2004	1.24263	594330.	2960240.	04123124
2005	1.83705	594330.	2960240.	05123124

HIGH 24-Hour

2001	17.88466	594330.	2960240.	01110924
2002	13.01052	594280.	2960240.	02112524
2003	18.11945	594330.	2960240.	03090924
2004	17.54089	594280.	2960240.	04101624
2005	20.16450	594280.	2960240.	05122324

HIGH 8-Hour

2001	51.75040	594330.	2960240.	01100308
2002	33.12107	594330.	2960240.	02011908
2003	38.48532	594280.	2960240.	03090924
2004	52.50146	594280.	2960240.	04101624
2005	54.36475	594330.	2960240.	05101108

HIGH 3-Hour

2001	81.63096	594330.	2960240.	01091706
2002	61.08240	594280.	2960240.	02121706
2003	89.91955	594280.	2960240.	03111321
2004	83.45336	594280.	2960240.	04101621
2005	86.59664	594280.	2960240.	05102721

HIGH 1-Hour

2001	119.16767	594330.	2960240.	01082604
2002	126.81297	594330.	2960240.	02040402
2003	136.38829	594305.	2960240.	03091124
2004	124.11192	594280.	2960240.	04101621
2005	145.17870	594280.	2960240.	05072204

SOURCE GROUP ID: G7559

Annual

2001	1.10151	594330.	2960240.	01123124
2002	1.24839	594330.	2960240.	02123124
2003	1.27036	594330.	2960240.	03123124
2004	1.18379	594330.	2960240.	04123124
2005	1.74739	594330.	2960240.	05123124

HIGH 24-Hour

	2001	16.92487	594330.	2960240.	01110924
	2002	12.30907	594330.	2960240.	02112524
	2003	17.18750	594330.	2960240.	03090924
	2004	16.64027	594280.	2960240.	04101624
	2005	19.17200	594330.	2960240.	05102824
HIGH	8-Hour				
	2001	48.85340	594330.	2960240.	01100308
	2002	31.33764	594330.	2960240.	02011908
	2003	36.49581	594280.	2960240.	03090924
	2004	49.69983	594280.	2960240.	04101624
	2005	51.34075	594330.	2960240.	05101108
HIGH	3-Hour				
	2001	77.13670	594330.	2960240.	01091706
	2002	57.34350	594280.	2960240.	02121706
	2003	85.08350	594280.	2960240.	03111321
	2004	79.09131	594280.	2960240.	04101621
	2005	81.96806	594280.	2960240.	05102721
HIGH	1-Hour				
	2001	113.02718	594330.	2960240.	01082604
	2002	119.83269	594330.	2960240.	02040402
	2003	129.27895	594305.	2960240.	03091124
	2004	117.34589	594280.	2960240.	04101621
	2005	137.85902	594280.	2960240.	05072204
SOURCE GROUP ID: G7535					
Annual					
	2001	1.06829	594330.	2960240.	01123124
	2002	1.21277	594330.	2960240.	02123124
	2003	1.23414	594330.	2960240.	03123124
	2004	1.15070	594330.	2960240.	04123124
	2005	1.69711	594330.	2960240.	05123124
HIGH	24-Hour				
	2001	16.38705	594330.	2960240.	01110924
	2002	11.92122	594330.	2960240.	02112524
	2003	16.66282	594330.	2960240.	03090924
	2004	16.13286	594280.	2960240.	04101624
	2005	18.62884	594330.	2960240.	05102824
HIGH	8-Hour				
	2001	47.23261	594330.	2960240.	01100308
	2002	30.33798	594330.	2960240.	02011908
	2003	35.37393	594280.	2960240.	03090924
	2004	48.12406	594280.	2960240.	04101624
	2005	49.64826	594330.	2960240.	05101108
HIGH	3-Hour				
	2001	74.61686	594330.	2960240.	01091706
	2002	55.38259	594330.	2960240.	02010821
	2003	82.36459	594280.	2960240.	03111321
	2004	76.63283	594280.	2960240.	04101621
	2005	79.36220	594280.	2960240.	05102721
HIGH	1-Hour				
	2001	109.55801	594330.	2960240.	01082604
	2002	115.90961	594330.	2960240.	02040402
	2003	125.26433	594305.	2960240.	03091124
	2004	113.54121	594280.	2960240.	04101621
	2005	133.71426	594280.	2960240.	05072204

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 REBEC- CT LOAD ANALYSIS, MPS 501G1 PLUS GAS CONDO 2/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION GA1095 POINT 594125.983 2960797.999 1.000
  LOCATION GB1095 POINT 594172.071 2960797.963 1.000
  LOCATION GC1095 POINT 594274.233 2960797.946 1.000

  LOCATION GA1059 POINT 594125.983 2960797.999 1.000
  LOCATION GB1059 POINT 594172.071 2960797.963 1.000
  LOCATION GC1059 POINT 594274.233 2960797.946 1.000

  LOCATION GA1035 POINT 594125.983 2960797.999 1.000
  LOCATION GB1035 POINT 594172.071 2960797.963 1.000
  LOCATION GC1035 POINT 594274.233 2960797.946 1.000

  LOCATION GA7595 POINT 594125.983 2960797.999 1.000
  LOCATION GB7595 POINT 594172.071 2960797.963 1.000
  LOCATION GC7595 POINT 594274.233 2960797.946 1.000

  LOCATION GA7559 POINT 594125.983 2960797.999 1.000
  LOCATION GB7559 POINT 594172.071 2960797.963 1.000
  LOCATION GC7559 POINT 594274.233 2960797.946 1.000

  LOCATION GA7535 POINT 594125.983 2960797.999 1.000
  LOCATION GB7535 POINT 594172.071 2960797.963 1.000
  LOCATION GC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F with duct firing
  SRCPARAM GA1095 3.3333  45.4  357.5  17.28 6.71
  SRCPARAM GB1095 3.3333  45.4  357.5  17.28 6.71
  SRCPARAM GC1095 3.3333  45.4  357.5  17.28 6.71
** Baseload, 59 F with duct firing
  SRCPARAM GA1059 3.3333  45.4  357.9  18.39 6.71
  SRCPARAM GB1059 3.3333  45.4  357.9  18.39 6.71
  SRCPARAM GC1059 3.3333  45.4  357.9  18.39 6.71
** Baseload, 35 F with duct firing
  SRCPARAM GA1035 3.3333  45.4  358.6  19.07 6.71
  SRCPARAM GB1035 3.3333  45.4  358.6  19.07 6.71
  SRCPARAM GC1035 3.3333  45.4  358.6  19.07 6.71
** 75% Load, 95 F
  SRCPARAM GA7595 3.3333  45.4  359.3  14.03 6.71
  SRCPARAM GB7595 3.3333  45.4  359.3  14.03 6.71
  SRCPARAM GC7595 3.3333  45.4  359.3  14.03 6.71
** 75% Load, 59 F
  SRCPARAM GA7559 3.3333  45.4  358.2  14.86 6.71
  SRCPARAM GB7559 3.3333  45.4  358.2  14.86 6.71
  SRCPARAM GC7559 3.3333  45.4  358.2  14.86 6.71
** 75% Load, 35 F
  SRCPARAM GA7535 3.3333  45.4  357.6  15.36 6.71
  SRCPARAM GB7535 3.3333  45.4  357.6  15.36 6.71
  SRCPARAM GC7535 3.3333  45.4  357.6  15.36 6.71

** Building Downwash **
SO BUILDHGT GA1035-GA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID GA1035-GA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GA1035-GA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GA1035-GA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GA1035-GA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GA1035-GA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GA1035-GA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN GA1035-GA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GA1035-GA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GA1035-GA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GA1035-GA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GA1035-GA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GA1035-GA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    GA1035-GA7595   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    GA1035-GA7595   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    GA1035-GA7595    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    GA1035-GA7595     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    GA1035-GA7595    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    GA1035-GA7595   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    GA1035-GA7595   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    GA1035-GA7595   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    GA1035-GA7595   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    GA1035-GA7595     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    GA1035-GA7595    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    GA1035-GA7595    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT GB1035-GB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID GB1035-GB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID GB1035-GB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GB1035-GB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GB1035-GB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GB1035-GB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GB1035-GB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN GB1035-GB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN GB1035-GB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GB1035-GB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GB1035-GB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GB1035-GB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GB1035-GB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    GB1035-GB7595   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    GB1035-GB7595   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    GB1035-GB7595    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    GB1035-GB7595     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    GB1035-GB7595    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    GB1035-GB7595   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    GB1035-GB7595   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    GB1035-GB7595    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    GB1035-GB7595   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    GB1035-GB7595     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    GB1035-GB7595     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    GB1035-GB7595    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT GC1035-GC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595    23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID GC1035-GC7595    18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID GC1035-GC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GC1035-GC7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GC1035-GC7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GC1035-GC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GC1035-GC7595    27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN GC1035-GC7595    10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN GC1035-GC7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GC1035-GC7595    25.81  27.87  29.09  29.43  28.87  27.43
```

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SO BUILDLEN GC1035-GC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GC1035-GC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GC1035-GC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    GC1035-GC7595   -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    GC1035-GC7595   -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    GC1035-GC7595    -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    GC1035-GC7595     4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    GC1035-GC7595    -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    GC1035-GC7595   -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    GC1035-GC7595   -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    GC1035-GC7595    16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    GC1035-GC7595   -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    GC1035-GC7595     3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    GC1035-GC7595    18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    GC1035-GC7595    14.78  12.36   9.56   6.48  14.59   0.08

  SRCGROUP G1095D GA1095 GB1095 GC1095
  SRCGROUP G1059D GA1059 GB1059 GC1059
  SRCGROUP G1035D GA1035 GB1035 GC1035
  SRCGROUP G7595 GA7595 GB7595 GC7595
  SRCGROUP G7559 GA7559 GB7559 GC7559
  SRCGROUP G7535 GA7535 GB7535 GC7535

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
**
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
  SURFFILE C:\amodmet\PBIMIA01.SFC
  PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENGAS.O01
AERMOD OUTPUT FILE NUMBER 2 :GENGAS.O02
AERMOD OUTPUT FILE NUMBER 3 :GENGAS.O03
AERMOD OUTPUT FILE NUMBER 4 :GENGAS.O04
AERMOD OUTPUT FILE NUMBER 5 :GENGAS.O05
First title for last output file is: 2001 RBEC- CT LOAD ANALYSIS, SIEMENS GAS 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: G1095D					
Annual					
	2001	0.51284	593500.	2960900.	01123124
	2002	0.61571	593600.	2961100.	02123124
	2003	0.56705	593700.	2961200.	03123124
	2004	0.54601	593500.	2960900.	04123124
	2005	0.51236	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	3.63836	593300.	2960500.	01100924
	2002	2.81082	593500.	2961200.	02062024
	2003	3.39174	593600.	2961200.	03061624
	2004	3.04231	594400.	2961600.	04090524
	2005	3.24094	593300.	2961000.	05070824
HIGH 8-Hour					
	2001	7.32886	593500.	2960600.	01100916
	2002	6.60099	593700.	2961200.	02042816
	2003	7.01136	593600.	2961200.	03062916
	2004	8.22470	594600.	2961500.	04090508
	2005	7.88923	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	8.32028	593600.	2961100.	01072412
	2002	8.06642	593600.	2961200.	02072512
	2003	8.11788	593500.	2960700.	03022412
	2004	10.27460	594900.	2961000.	04092524
	2005	11.01758	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	10.35135	593500.	2961600.	01091406
	2002	9.17284	593600.	2961000.	02053111
	2003	12.64923	593300.	2961000.	03120323
	2004	14.56279	594000.	2960100.	04090406
	2005	12.79879	593700.	2961500.	05070906
SOURCE GROUP ID: G1059D					
Annual					
	2001	0.47863	593500.	2960900.	01123124
	2002	0.57688	593600.	2961100.	02123124
	2003	0.53170	593700.	2961200.	03123124
	2004	0.51240	593500.	2960900.	04123124
	2005	0.47983	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	3.28813	593300.	2960500.	01100924
	2002	2.65302	593500.	2961200.	02062024
	2003	3.18742	593600.	2961200.	03061624
	2004	2.85292	593700.	2961300.	04082624
	2005	2.97496	593500.	2961100.	05061024
HIGH 8-Hour					
	2001	6.67154	593500.	2960600.	01100916
	2002	6.19289	593700.	2961200.	02042816
	2003	6.64073	593600.	2961200.	03062916
	2004	7.90502	594600.	2961500.	04090508
	2005	7.55143	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	7.78527	593600.	2961100.	01072412
	2002	7.62672	593600.	2961200.	02072512
	2003	7.64515	593500.	2960700.	03022412
	2004	9.93192	594900.	2961000.	04092524
	2005	11.16433	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	9.46820	593500.	2961600.	01091406
	2002	8.61608	593600.	2961000.	02053111

2003	11.63569	593300.	2961000.	03120323
2004	17.70155	594700.	2960600.	04092519
2005	11.90218	593400.	2961300.	05102404

SOURCE GROUP ID: G1035D

Annual

2001	0.45859	593500.	2960900.	01123124
2002	0.55411	593600.	2961100.	02123124
2003	0.51177	593600.	2961200.	03123124
2004	0.49279	593500.	2960900.	04123124
2005	0.46084	593500.	2960900.	05123124

HIGH 24-Hour

2001	3.09683	593300.	2960500.	01100924
2002	2.56047	593500.	2961200.	02062024
2003	3.06621	593600.	2961200.	03061624
2004	2.75214	593700.	2961300.	04082624
2005	2.87736	593700.	2961400.	05070424

HIGH 8-Hour

2001	6.31911	593500.	2960600.	01100916
2002	5.96504	593500.	2960900.	02091816
2003	6.41707	593600.	2961200.	03062916
2004	7.71209	594600.	2961500.	04090508
2005	7.22535	593500.	2961300.	05102408

HIGH 3-Hour

2001	7.46822	593600.	2961100.	01072412
2002	7.36176	593600.	2961200.	02072512
2003	7.36272	593500.	2960700.	03022412
2004	9.72580	594900.	2961000.	04092524
2005	10.78360	593400.	2961300.	05102406

HIGH 1-Hour

2001	8.92977	593500.	2961600.	01091406
2002	8.28534	593600.	2961000.	02053111
2003	11.01839	593300.	2961000.	03120323
2004	17.06849	594700.	2960600.	04092519
2005	11.32878	593400.	2961300.	05102404

SOURCE GROUP ID: G7595

Annual

2001	0.61534	593500.	2960800.	01123124
2002	0.72423	593600.	2961100.	02123124
2003	0.66511	593700.	2961200.	03123124
2004	0.64210	593500.	2960900.	04123124
2005	0.60293	593500.	2960900.	05123124

HIGH 24-Hour

2001	4.71910	593300.	2960500.	01100924
2002	3.41826	593700.	2961500.	02030224
2003	3.93100	593600.	2961200.	03061624
2004	3.82945	594300.	2961500.	04090524
2005	4.14676	593300.	2961000.	05070824

HIGH 8-Hour

2001	9.20402	593500.	2960600.	01100916
2002	8.03519	593800.	2961400.	02030216
2003	8.18164	593700.	2961100.	03062916
2004	9.12813	594500.	2961400.	04090508
2005	8.88932	593500.	2961300.	05102408

HIGH 3-Hour

2001	9.76449	593600.	2961100.	01072412
2002	9.54241	593500.	2960800.	02120912
2003	9.75547	593600.	2960700.	03022412
2004	11.11275	594900.	2961000.	04092524
2005	12.36429	593400.	2961300.	05102406

HIGH 1-Hour

2001	11.98354	593300.	2960400.	01100918
2002	10.62551	593600.	2961000.	02053111
2003	15.11463	593300.	2961000.	03120323
2004	16.41891	594000.	2960200.	04090406
2005	14.34394	593400.	2960900.	05082519

SOURCE GROUP ID: G7559

Annual

2001	0.57977	593500.	2960800.	01123124
2002	0.68701	593600.	2961100.	02123124
2003	0.63152	593700.	2961200.	03123124
2004	0.60901	593500.	2960900.	04123124
2005	0.57228	593500.	2960900.	05123124

HIGH 24-Hour

	2001	4.34181	593300.	2960500.	01100924
	2002	3.17368	593700.	2961500.	02030224
	2003	3.75105	593600.	2961200.	03061624
	2004	3.52847	594300.	2961500.	04090524
	2005	3.83756	593300.	2961000.	05070824
HIGH 8-Hour					
	2001	8.57847	593500.	2960600.	01100916
	2002	7.50008	593800.	2961400.	02030216
	2003	7.72391	593700.	2961100.	03062916
	2004	8.76072	594600.	2961500.	04090508
	2005	8.48623	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	9.25646	593600.	2961100.	01072412
	2002	8.87711	593500.	2960800.	02120912
	2003	9.05741	593600.	2960700.	03022412
	2004	10.84819	594900.	2961000.	04092524
	2005	11.94236	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	11.11676	593200.	2960400.	01100918
	2002	10.15205	593600.	2961000.	02053111
	2003	14.33739	593300.	2961000.	03120323
	2004	15.78765	594000.	2960100.	04090406
	2005	14.53353	593800.	2961400.	05070906
SOURCE GROUP ID: G7535					
Annual					
	2001	0.56089	593500.	2960800.	01123124
	2002	0.66727	593600.	2961100.	02123124
	2003	0.61378	593700.	2961200.	03123124
	2004	0.59137	593500.	2960900.	04123124
	2005	0.55576	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	4.13938	593300.	2960500.	01100924
	2002	3.04625	593700.	2961500.	02030224
	2003	3.65540	593600.	2961200.	03061624
	2004	3.37848	594400.	2961500.	04090524
	2005	3.66943	593300.	2961000.	05070824
HIGH 8-Hour					
	2001	8.22371	593500.	2960600.	01100916
	2002	7.22295	593700.	2961300.	02092516
	2003	7.50826	593700.	2961100.	03062916
	2004	8.61814	594600.	2961500.	04090508
	2005	8.25532	593500.	2961300.	05102408
HIGH 3-Hour					
	2001	9.00554	593600.	2961100.	01072412
	2002	8.62567	593600.	2961200.	02072512
	2003	8.74283	593600.	2960700.	03022412
	2004	10.69402	594900.	2961000.	04092524
	2005	11.69838	593400.	2961300.	05102406
HIGH 1-Hour					
	2001	10.64380	593200.	2960400.	01100918
	2002	9.88925	593600.	2961000.	02053111
	2003	13.88954	593300.	2961000.	03120323
	2004	15.46431	594000.	2960100.	04090406
	2005	13.96876	593700.	2961500.	05070906

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- CT LOAD ANALYSIS, SIEMENS GAS 12/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
**********
** ISCST3 Source Pathway
**********
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION GA1095 POINT 594125.983 2960797.999 1.000
  LOCATION GB1095 POINT 594172.071 2960797.963 1.000
  LOCATION GC1095 POINT 594274.233 2960797.946 1.000

  LOCATION GA1059 POINT 594125.983 2960797.999 1.000
  LOCATION GB1059 POINT 594172.071 2960797.963 1.000
  LOCATION GC1059 POINT 594274.233 2960797.946 1.000

  LOCATION GA1035 POINT 594125.983 2960797.999 1.000
  LOCATION GB1035 POINT 594172.071 2960797.963 1.000
  LOCATION GC1035 POINT 594274.233 2960797.946 1.000

  LOCATION GA7595 POINT 594125.983 2960797.999 1.000
  LOCATION GB7595 POINT 594172.071 2960797.963 1.000
  LOCATION GC7595 POINT 594274.233 2960797.946 1.000

  LOCATION GA7559 POINT 594125.983 2960797.999 1.000
  LOCATION GB7559 POINT 594172.071 2960797.963 1.000
  LOCATION GC7559 POINT 594274.233 2960797.946 1.000

  LOCATION GA7535 POINT 594125.983 2960797.999 1.000
  LOCATION GB7535 POINT 594172.071 2960797.963 1.000
  LOCATION GC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F with duct firing
  SRCPARAM GA1095 3.3333  45.4  357.5  16.57 6.71
  SRCPARAM GB1095 3.3333  45.4  357.5  16.57 6.71
  SRCPARAM GC1095 3.3333  45.4  357.5  16.57 6.71
** Baseload, 59 F with duct firing
  SRCPARAM GA1059 3.3333  45.4  357.9  17.82 6.71
  SRCPARAM GB1059 3.3333  45.4  357.9  17.82 6.71
  SRCPARAM GC1059 3.3333  45.4  357.9  17.82 6.71
** Baseload, 35 F with duct firing
  SRCPARAM GA1035 3.3333  45.4  358.6  18.54 6.71
  SRCPARAM GB1035 3.3333  45.4  358.6  18.54 6.71
  SRCPARAM GC1035 3.3333  45.4  358.6  18.54 6.71
** 75% Load, 95 F
  SRCPARAM GA7595 3.3333  45.4  359.3  13.37 6.71
  SRCPARAM GB7595 3.3333  45.4  359.3  13.37 6.71
  SRCPARAM GC7595 3.3333  45.4  359.3  13.37 6.71
** 75% Load, 59 F
  SRCPARAM GA7559 3.3333  45.4  358.2  14.41 6.71
  SRCPARAM GB7559 3.3333  45.4  358.2  14.41 6.71
  SRCPARAM GC7559 3.3333  45.4  358.2  14.41 6.71
** 75% Load, 35 F
  SRCPARAM GA7535 3.3333  45.4  357.6  15.02 6.71
  SRCPARAM GB7535 3.3333  45.4  357.6  15.02 6.71
  SRCPARAM GC7535 3.3333  45.4  357.6  15.02 6.71

** Building Downwash **
SO BUILDHGT GA1035-GA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595    23.47  23.47  23.47  23.47  23.47  23.47
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SO BUILDHGT GA1035-GA7595   23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID GA1035-GA7595   18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GA1035-GA7595   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GA1035-GA7595   27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GA1035-GA7595   15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GA1035-GA7595   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GA1035-GA7595   27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN GA1035-GA7595   10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GA1035-GA7595   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GA1035-GA7595   25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GA1035-GA7595   28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GA1035-GA7595   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GA1035-GA7595   25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    GA1035-GA7595  -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    GA1035-GA7595  -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    GA1035-GA7595   -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    GA1035-GA7595    4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    GA1035-GA7595   -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    GA1035-GA7595  -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    GA1035-GA7595  -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    GA1035-GA7595  -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    GA1035-GA7595  -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    GA1035-GA7595    3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    GA1035-GA7595   18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    GA1035-GA7595   14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT GB1035-GB7595   29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GB1035-GB7595   23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID GB1035-GB7595   18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID GB1035-GB7595   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GB1035-GB7595   27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GB1035-GB7595   15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GB1035-GB7595   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GB1035-GB7595   27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN GB1035-GB7595   10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN GB1035-GB7595   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GB1035-GB7595   25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GB1035-GB7595   28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GB1035-GB7595   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GB1035-GB7595   25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    GB1035-GB7595  -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    GB1035-GB7595  -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    GB1035-GB7595   -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    GB1035-GB7595    4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    GB1035-GB7595   39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    GB1035-GB7595  -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    GB1035-GB7595  -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    GB1035-GB7595   -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    GB1035-GB7595  -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    GB1035-GB7595    3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    GB1035-GB7595    2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    GB1035-GB7595   14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT GC1035-GC7595   29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GC1035-GC7595   23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID GC1035-GC7595   18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID GC1035-GC7595   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GC1035-GC7595   27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID GC1035-GC7595   15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID GC1035-GC7595   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID GC1035-GC7595   27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN GC1035-GC7595   10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN GC1035-GC7595   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GC1035-GC7595   25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN GC1035-GC7595   28.87  29.43  29.09  27.87  25.81  22.95
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SO BUILDLEN GC1035-GC7595      19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN GC1035-GC7595      25.81   27.87   29.09   29.43   10.39    7.41
SO XBADJ    GC1035-GC7595     -87.49 -109.62 -111.69  -28.71  -25.26  -21.04
SO XBADJ    GC1035-GC7595    -112.31 -111.55 -107.40   -4.08   -2.88   -1.60
SO XBADJ    GC1035-GC7595      -0.27    1.08    2.38    3.62    4.75    5.73
SO XBADJ    GC1035-GC7595       4.68    3.50    2.20    0.84   -0.54   -1.91
SO XBADJ    GC1035-GC7595      -3.22   -4.44   -5.52  -11.19  -16.52  -21.36
SO XBADJ    GC1035-GC7595     -25.54  -28.95  -31.47  -33.05  -87.46  -87.25
SO YBADJ    GC1035-GC7595     -14.43   23.32    8.08  -12.64  -15.01  -16.93
SO YBADJ    GC1035-GC7595      16.51   -1.56  -19.58  -19.12  -18.21  -16.75
SO YBADJ    GC1035-GC7595     -14.78  -12.36   -9.56   -6.48   -3.20    0.18
SO YBADJ    GC1035-GC7595       3.56    6.82    9.88   12.64   15.01   16.93
SO YBADJ    GC1035-GC7595      18.33   19.18   19.44   19.12   18.21   16.75
SO YBADJ    GC1035-GC7595      14.78   12.36    9.56    6.48   14.59    0.08

  SRCGROUP G1095D GA1095 GB1095 GC1095
  SRCGROUP G1059D GA1059 GB1059 GC1059
  SRCGROUP G1035D GA1035 GB1035 GC1035
  SRCGROUP G7595 GA7595 GB7595 GC7595
  SRCGROUP G7559 GA7559 GB7559 GC7559
  SRCGROUP G7535 GA7535 GB7535 GC7535

SO FINISHED
**
**********************************************
** ISCST3 Receptor Pathway
**********************************************
**
**
RE STARTING
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********************************************
** AERMOD Meteorology Pathway
**********************************************
**
**
ME STARTING
**   SURFFILE C:\amodmet\PBIMIA01.SFC
**   PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********************************************
** AERMOD Output Pathway
**********************************************
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENGASCD.O01
AERMOD OUTPUT FILE NUMBER 2 :GENGASCD.O02
AERMOD OUTPUT FILE NUMBER 3 :GENGASCD.O03
AERMOD OUTPUT FILE NUMBER 4 :GENGASCD.O04
AERMOD OUTPUT FILE NUMBER 5 :GENGASCD.O05
First title for last output file is: 2001 RBEC- CT LOAD ANALYSIS, SIEMENS GAS CONDO 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: G1095D					
Annual					
	2001	0.97670	594330.	2960240.	01123124
	2002	1.11491	594330.	2960240.	02123124
	2003	1.13483	594330.	2960240.	03123124
	2004	1.06076	594330.	2960240.	04123124
	2005	1.55903	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	14.88980	594330.	2960240.	01110924
	2002	10.84097	594330.	2960240.	02112524
	2003	15.13847	594330.	2960240.	03090924
	2004	14.69589	594280.	2960240.	04101624
	2005	17.10882	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	42.67643	594330.	2960240.	01100308
	2002	27.55903	594330.	2960240.	02011908
	2003	32.06120	594280.	2960240.	03090924
	2004	43.65406	594280.	2960240.	04101624
	2005	44.93356	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	67.39314	594330.	2960240.	01091706
	2002	50.23542	594330.	2960240.	02010821
	2003	74.52006	594280.	2960240.	03111321
	2004	69.62098	594280.	2960240.	04101621
	2005	71.96679	594280.	2960240.	05102721
HIGH 1-Hour					
	2001	99.29665	594330.	2960240.	01082604
	2002	104.81757	594330.	2960240.	02040402
	2003	113.49023	594305.	2960240.	03091124
	2004	102.73814	594280.	2960240.	04101621
	2005	121.29112	594280.	2960240.	05072204
SOURCE GROUP ID: G1059D					
Annual					
	2001	0.88913	594330.	2960240.	01123124
	2002	1.02089	594330.	2960240.	02123124
	2003	1.03944	594330.	2960240.	03123124
	2004	0.97432	594330.	2960240.	04123124
	2005	1.42603	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	13.46022	594330.	2960240.	01110924
	2002	9.80868	594330.	2960240.	02112524
	2003	13.66469	594330.	2960240.	03090924
	2004	13.30530	594280.	2960240.	04101624
	2005	15.63165	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	38.33117	594330.	2960240.	01100308
	2002	24.90286	594330.	2960240.	02011908
	2003	28.84463	594280.	2960240.	03090924
	2004	39.33972	594280.	2960240.	04101624
	2005	40.60067	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	60.46532	594330.	2960240.	01091706
	2002	45.33110	594330.	2960240.	02010821
	2003	66.95037	594280.	2960240.	03111321
	2004	62.82168	594280.	2960240.	04101621
	2005	64.81501	594280.	2960240.	05102721
HIGH 1-Hour					
	2001	89.28211	594330.	2960240.	01082604
	2002	94.15074	594330.	2960240.	02040402

2003	102.02393	594305.	2960240.	03091124
2004	92.33178	594280.	2960240.	04101621
2005	109.10194	594280.	2960240.	05072204

SOURCE GROUP ID: G1035D

Annual

2001	0.83862	594330.	2960240.	01123124
2002	0.96647	594330.	2960240.	02123124
2003	0.98418	594330.	2960240.	03123124
2004	0.92430	594330.	2960240.	04123124
2005	1.34899	594330.	2960240.	05123124

HIGH 24-Hour

2001	12.63457	594330.	2960240.	01110924
2002	9.21188	594330.	2960240.	02112524
2003	12.80033	594330.	2960240.	03090924
2004	12.49376	594280.	2960240.	04101624
2005	14.76859	594330.	2960240.	05102824

HIGH 8-Hour

2001	35.81983	594330.	2960240.	01100308
2002	23.36782	594330.	2960240.	02011908
2003	26.97547	594305.	2960240.	03090924
2004	36.82542	594280.	2960240.	04101624
2005	38.09232	594280.	2960240.	05122324

HIGH 3-Hour

2001	56.43399	594330.	2960240.	01091706
2002	42.51685	594330.	2960240.	02010821
2003	62.52252	594280.	2960240.	03111321
2004	58.84412	594280.	2960240.	04101621
2005	60.64386	594280.	2960240.	05102721

HIGH 1-Hour

2001	83.35609	594330.	2960240.	01082604
2002	87.94789	594330.	2960240.	02040402
2003	95.25778	594305.	2960240.	03091124
2004	86.26907	594280.	2960240.	04101621
2005	101.84787	594280.	2960240.	05072204

SOURCE GROUP ID: G7595

Annual

2001	1.22923	594330.	2960240.	01123124
2002	1.38392	594330.	2960240.	02123124
2003	1.40779	594330.	2960240.	03123124
2004	1.30920	594330.	2960240.	04123124
2005	1.93982	594330.	2960240.	05123124

HIGH 24-Hour

2001	19.01042	594330.	2960240.	01110924
2002	13.88865	594280.	2960240.	02112524
2003	19.25945	594330.	2960240.	03090924
2004	18.60112	594280.	2960240.	04101624
2005	21.32758	594280.	2960240.	05122324

HIGH 8-Hour

2001	55.20316	594330.	2960240.	01100308
2002	35.20324	594330.	2960240.	02011908
2003	40.95810	594280.	2960240.	03090924
2004	55.82064	594280.	2960240.	04101624
2005	58.12354	594330.	2960240.	05101108

HIGH 3-Hour

2001	87.08614	594330.	2960240.	01091706
2002	65.29417	594280.	2960240.	02121706
2003	95.79179	594280.	2960240.	03111321
2004	88.62476	594280.	2960240.	04101621
2005	92.06842	594280.	2960240.	05102721

HIGH 1-Hour

2001	126.75564	594330.	2960240.	01082604
2002	135.07085	594330.	2960240.	02040402
2003	145.08868	594305.	2960240.	03091124
2004	132.14502	594280.	2960240.	04101621
2005	154.30948	594280.	2960240.	05072204

SOURCE GROUP ID: G7559

Annual

2001	1.14269	594330.	2960240.	01123124
2002	1.29199	594330.	2960240.	02123124
2003	1.31458	594330.	2960240.	03123124
2004	1.22402	594330.	2960240.	04123124
2005	1.80911	594330.	2960240.	05123124

HIGH 24-Hour

	2001	17.60162	594330.	2960240.	01110924
	2002	12.79716	594330.	2960240.	02112524
	2003	17.87519	594330.	2960240.	03090924
	2004	17.28307	594280.	2960240.	04101624
	2005	19.85194	594280.	2960240.	05122324
HIGH 8-Hour					
	2001	50.92372	594330.	2960240.	01100308
	2002	32.59122	594330.	2960240.	02011908
	2003	37.98949	594280.	2960240.	03090924
	2004	51.70745	594280.	2960240.	04101624
	2005	53.58940	594330.	2960240.	05101108
HIGH 3-Hour					
	2001	80.41337	594330.	2960240.	01091706
	2002	59.85619	594280.	2960240.	02121706
	2003	88.62656	594280.	2960240.	03111321
	2004	82.22915	594280.	2960240.	04101621
	2005	85.28316	594280.	2960240.	05102721
HIGH 1-Hour					
	2001	117.63413	594330.	2960240.	01082604
	2002	124.82344	594330.	2960240.	02040402
	2003	134.56111	594305.	2960240.	03091124
	2004	122.20458	594280.	2960240.	04101621
	2005	143.41833	594280.	2960240.	05072204
SOURCE GROUP ID: G7535					
Annual					
	2001	1.09730	594330.	2960240.	01123124
	2002	1.24359	594330.	2960240.	02123124
	2003	1.26541	594330.	2960240.	03123124
	2004	1.17914	594330.	2960240.	04123124
	2005	1.74064	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	16.86319	594330.	2960240.	01110924
	2002	12.26462	594330.	2960240.	02112524
	2003	17.14783	594330.	2960240.	03090924
	2004	16.58698	594280.	2960240.	04101624
	2005	19.10457	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	48.68673	594330.	2960240.	01100308
	2002	31.22045	594330.	2960240.	02011908
	2003	36.42850	594280.	2960240.	03090924
	2004	49.54043	594280.	2960240.	04101624
	2005	51.22573	594330.	2960240.	05101108
HIGH 3-Hour					
	2001	76.92093	594330.	2960240.	01091706
	2002	57.02426	594280.	2960240.	02121706
	2003	84.86134	594280.	2960240.	03111321
	2004	78.85012	594280.	2960240.	04101621
	2005	81.70301	594280.	2960240.	05102721
HIGH 1-Hour					
	2001	112.81530	594330.	2960240.	01082604
	2002	119.42855	594330.	2960240.	02040402
	2003	128.99883	594305.	2960240.	03091124
	2004	116.96784	594280.	2960240.	04101621
	2005	137.65092	594280.	2960240.	05072204

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- CT LOAD ANALYSIS, SIEMENS GAS CONDO 12/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION GA1095 POINT 594125.983 2960797.999 1.000
  LOCATION GB1095 POINT 594172.071 2960797.963 1.000
  LOCATION GC1095 POINT 594274.233 2960797.946 1.000

  LOCATION GA1059 POINT 594125.983 2960797.999 1.000
  LOCATION GB1059 POINT 594172.071 2960797.963 1.000
  LOCATION GC1059 POINT 594274.233 2960797.946 1.000

  LOCATION GA1035 POINT 594125.983 2960797.999 1.000
  LOCATION GB1035 POINT 594172.071 2960797.963 1.000
  LOCATION GC1035 POINT 594274.233 2960797.946 1.000

  LOCATION GA7595 POINT 594125.983 2960797.999 1.000
  LOCATION GB7595 POINT 594172.071 2960797.963 1.000
  LOCATION GC7595 POINT 594274.233 2960797.946 1.000

  LOCATION GA7559 POINT 594125.983 2960797.999 1.000
  LOCATION GB7559 POINT 594172.071 2960797.963 1.000
  LOCATION GC7559 POINT 594274.233 2960797.946 1.000

  LOCATION GA7535 POINT 594125.983 2960797.999 1.000
  LOCATION GB7535 POINT 594172.071 2960797.963 1.000
  LOCATION GC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F with duct firing
  SRCPARAM GA1095 3.3333  45.4  357.5  16.57 6.71
  SRCPARAM GB1095 3.3333  45.4  357.5  16.57 6.71
  SRCPARAM GC1095 3.3333  45.4  357.5  16.57 6.71
** Baseload, 59 F with duct firing
  SRCPARAM GA1059 3.3333  45.4  357.9  17.82 6.71
  SRCPARAM GB1059 3.3333  45.4  357.9  17.82 6.71
  SRCPARAM GC1059 3.3333  45.4  357.9  17.82 6.71
** Baseload, 35 F with duct firing
  SRCPARAM GA1035 3.3333  45.4  358.6  18.54 6.71
  SRCPARAM GB1035 3.3333  45.4  358.6  18.54 6.71
  SRCPARAM GC1035 3.3333  45.4  358.6  18.54 6.71
** 75% Load, 95 F
  SRCPARAM GA7595 3.3333  45.4  359.3  13.37 6.71
  SRCPARAM GB7595 3.3333  45.4  359.3  13.37 6.71
  SRCPARAM GC7595 3.3333  45.4  359.3  13.37 6.71
** 75% Load, 59 F
  SRCPARAM GA7559 3.3333  45.4  358.2  14.41 6.71
  SRCPARAM GB7559 3.3333  45.4  358.2  14.41 6.71
  SRCPARAM GC7559 3.3333  45.4  358.2  14.41 6.71
** 75% Load, 35 F
  SRCPARAM GA7535 3.3333  45.4  357.6  15.02 6.71
  SRCPARAM GB7535 3.3333  45.4  357.6  15.02 6.71
  SRCPARAM GC7535 3.3333  45.4  357.6  15.02 6.71

** Building Downwash **
SO BUILDHGT GA1035-GA7595     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT GA1035-GA7595     23.47  23.47  23.47  23.47  23.47  23.47
```

SO BUILDHGT	GA1035-GA7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GA1035-GA7595	23.47	23.47	23.47	29.57	29.57	29.57
SO BUILDWID	GA1035-GA7595	18.85	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	GA1035-GA7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	GA1035-GA7595	27.87	25.81	22.95	19.41	15.27	10.67
SO BUILDWID	GA1035-GA7595	15.27	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	GA1035-GA7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	GA1035-GA7595	27.87	25.81	22.95	19.29	18.85	17.83
SO BUILDLEN	GA1035-GA7595	10.39	29.43	29.09	27.87	25.81	22.95
SO BUILDLEN	GA1035-GA7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	GA1035-GA7595	25.81	27.87	29.09	29.43	28.87	27.43
SO BUILDLEN	GA1035-GA7595	28.87	29.43	29.09	27.87	25.81	22.95
SO BUILDLEN	GA1035-GA7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	GA1035-GA7595	25.81	27.87	29.09	13.06	10.39	7.41
SO XBADJ	GA1035-GA7595	-87.54	-32.91	-31.26	-28.65	-25.18	-20.94
SO XBADJ	GA1035-GA7595	-16.07	-10.71	-5.02	-3.94	-2.74	-1.46
SO XBADJ	GA1035-GA7595	-0.14	1.19	2.48	3.70	4.80	5.76
SO XBADJ	GA1035-GA7595	4.69	3.48	2.17	0.78	-0.62	-2.01
SO XBADJ	GA1035-GA7595	-3.34	-4.56	-5.65	-11.33	-16.66	-21.49
SO XBADJ	GA1035-GA7595	-25.67	-29.06	-31.57	-100.73	-87.54	-87.32
SO YBADJ	GA1035-GA7595	-14.51	-6.96	-10.01	-12.76	-15.13	-17.03
SO YBADJ	GA1035-GA7595	-18.41	-19.24	-19.48	-19.13	-18.20	-16.71
SO YBADJ	GA1035-GA7595	-14.72	-12.28	-9.46	-6.36	-3.07	0.32
SO YBADJ	GA1035-GA7595	3.69	6.96	10.01	12.76	15.13	17.03
SO YBADJ	GA1035-GA7595	18.41	19.24	19.48	19.13	18.20	16.71
SO YBADJ	GA1035-GA7595	14.72	12.28	9.46	-14.45	14.53	0.01

SO BUILDHGT	GB1035-GB7595	29.57	29.57	29.57	23.47	23.47	23.47
SO BUILDHGT	GB1035-GB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GB1035-GB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GB1035-GB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GB1035-GB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GB1035-GB7595	23.47	23.47	23.47	23.17	29.57	29.57
SO BUILDWID	GB1035-GB7595	18.85	19.29	19.15	25.81	27.87	29.09
SO BUILDWID	GB1035-GB7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	GB1035-GB7595	27.87	25.81	22.95	19.41	15.27	10.67
SO BUILDWID	GB1035-GB7595	15.27	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	GB1035-GB7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	GB1035-GB7595	27.87	25.81	22.95	27.91	18.85	17.83
SO BUILDLEN	GB1035-GB7595	10.39	13.06	15.33	27.87	25.81	22.95
SO BUILDLEN	GB1035-GB7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	GB1035-GB7595	25.81	27.87	29.09	29.43	28.87	27.43
SO BUILDLEN	GB1035-GB7595	28.87	29.43	29.09	27.87	25.81	22.95
SO BUILDLEN	GB1035-GB7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	GB1035-GB7595	25.81	27.87	29.09	47.73	10.39	7.41
SO XBADJ	GB1035-GB7595	-87.51	-100.83	-103.09	-58.25	-60.46	-60.84
SO XBADJ	GB1035-GB7595	-59.36	-56.09	-51.10	-4.13	-2.91	-1.59
SO XBADJ	GB1035-GB7595	-0.23	1.14	2.48	3.74	4.89	5.88
SO XBADJ	GB1035-GB7595	4.85	3.67	2.38	30.38	34.66	37.88
SO XBADJ	GB1035-GB7595	39.96	40.82	40.44	-11.14	-16.50	-21.36
SO XBADJ	GB1035-GB7595	-25.58	-29.01	-31.57	-109.53	-87.41	-87.24
SO YBADJ	GB1035-GB7595	-14.22	14.74	-1.86	22.56	14.53	6.05
SO YBADJ	GB1035-GB7595	-2.62	-11.20	-19.44	-19.29	-18.38	-16.92
SO YBADJ	GB1035-GB7595	-14.95	-12.52	-9.71	-6.61	-3.31	0.10
SO YBADJ	GB1035-GB7595	3.50	6.80	9.89	-22.56	-14.53	-6.05
SO YBADJ	GB1035-GB7595	2.62	11.20	19.44	19.29	18.38	16.92
SO YBADJ	GB1035-GB7595	14.95	12.52	9.71	-23.01	14.79	0.29

SO BUILDHGT	GC1035-GC7595	29.57	23.17	23.17	23.47	23.47	23.47
SO BUILDHGT	GC1035-GC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GC1035-GC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GC1035-GC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GC1035-GC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	GC1035-GC7595	23.47	23.47	23.47	23.47	29.57	29.57
SO BUILDWID	GC1035-GC7595	18.85	27.91	34.24	25.81	27.87	29.09
SO BUILDWID	GC1035-GC7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	GC1035-GC7595	27.87	25.81	22.95	19.41	15.27	10.67
SO BUILDWID	GC1035-GC7595	15.27	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	GC1035-GC7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	GC1035-GC7595	27.87	25.81	22.95	19.41	18.85	17.83
SO BUILDLEN	GC1035-GC7595	10.39	47.73	46.38	27.87	25.81	22.95
SO BUILDLEN	GC1035-GC7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	GC1035-GC7595	25.81	27.87	29.09	29.43	28.87	27.43

```
SO BUILDLEN GC1035-GC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN GC1035-GC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN GC1035-GC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    GC1035-GC7595   -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    GC1035-GC7595   -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    GC1035-GC7595    -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    GC1035-GC7595     4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    GC1035-GC7595    -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    GC1035-GC7595   -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    GC1035-GC7595   -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    GC1035-GC7595    16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    GC1035-GC7595   -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    GC1035-GC7595     3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    GC1035-GC7595    18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    GC1035-GC7595    14.78  12.36   9.56   6.48  14.59   0.08

  SRCGROUP G1095D GA1095 GB1095 GC1095
  SRCGROUP G1059D GA1059 GB1059 GC1059
  SRCGROUP G1035D GA1035 GB1035 GC1035
  SRCGROUP G7595 GA7595 GB7595 GC7595
  SRCGROUP G7559 GA7559 GB7559 GC7559
  SRCGROUP G7535 GA7535 GB7535 GC7535

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
**
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
**   SURFFILE C:\amodmet\PBIMIA01.SFC
**   PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

PREDICTED IMPACT FOR CTS/HRSGS FIRING FUEL OIL AND MODELED WITH 10 G/S EMISSION RATE

1. SUMMARY FILE
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENOILMP.O01
AERMOD OUTPUT FILE NUMBER 2 :GENOILMP.O02
AERMOD OUTPUT FILE NUMBER 3 :GENOILMP.O03
AERMOD OUTPUT FILE NUMBER 4 :GENOILMP.O04
AERMOD OUTPUT FILE NUMBER 5 :GENOILMP.O05
First title for last output file is: 2001 RBEC- LOAD ANALYSIS, MPS 501G1 PLUS OIL 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: O1095					
Annual					
	2001	0.23622	593400.	2960800.	01123124
	2002	0.29644	593500.	2961200.	02123124
	2003	0.27921	593600.	2961300.	03123124
	2004	0.26847	593500.	2961000.	04123124
	2005	0.24770	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	1.61897	593300.	2960500.	01100924
	2002	1.47615	593700.	2961600.	02030224
	2003	1.63773	593600.	2961200.	03061624
	2004	1.89373	594600.	2961500.	04090524
	2005	1.74009	593300.	2961200.	05061024
HIGH 8-Hour					
	2001	4.12325	593300.	2960500.	01100916
	2002	3.85218	593700.	2961600.	02030216
	2003	3.67399	593600.	2961200.	03062916
	2004	5.60695	594700.	2961600.	04090508
	2005	4.10070	593300.	2961400.	05102408
HIGH 3-Hour					
	2001	4.33023	593600.	2960200.	01050615
	2002	4.52202	593400.	2961100.	02040812
	2003	4.43767	593600.	2961300.	03040812
	2004	8.02710	594700.	2961500.	04090503
	2005	6.48721	593200.	2961400.	05102406
HIGH 1-Hour					
	2001	4.82647	593400.	2960800.	01042212
	2002	5.11927	593500.	2961100.	02081511
	2003	5.23755	592800.	2961100.	03120323
	2004	12.68600	594800.	2960700.	04092520
	2005	8.52345	593400.	2961300.	05102407
SOURCE GROUP ID: O1059					
Annual					
	2001	0.21594	593400.	2960800.	01123124
	2002	0.27286	593500.	2961200.	02123124
	2003	0.25716	593600.	2961300.	03123124
	2004	0.24695	593500.	2961000.	04123124
	2005	0.22768	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	1.48594	593200.	2960500.	01100924
	2002	1.37153	593700.	2961600.	02030224
	2003	1.50293	593600.	2961200.	03061624
	2004	1.77675	594700.	2961600.	04090524
	2005	1.61467	593300.	2961200.	05061024
HIGH 8-Hour					
	2001	3.80768	593300.	2960500.	01100916
	2002	3.59694	593700.	2961600.	02030216
	2003	3.38469	593600.	2961200.	03062916
	2004	5.28306	594700.	2961600.	04090508
	2005	3.70597	593300.	2961400.	05102408
HIGH 3-Hour					
	2001	4.04435	593600.	2960200.	01050615
	2002	4.21954	593400.	2961100.	02040812
	2003	4.11436	593600.	2961300.	03040812
	2004	7.85522	594700.	2961500.	04090503
	2005	5.89085	593200.	2961400.	05102406
HIGH 1-Hour					
	2001	4.51538	593400.	2960800.	01042212
	2002	4.80441	593500.	2961100.	02081511

2003	4.66109	595000.	2960600.	03041012
2004	11.76862	594900.	2960700.	04092520
2005	8.01696	593400.	2961300.	05102407

SOURCE GROUP ID: O1035

Annual

2001	0.20395	593400.	2960800.	01123124
2002	0.25877	593500.	2961200.	02123124
2003	0.24400	593600.	2961300.	03123124
2004	0.23416	593500.	2961000.	04123124
2005	0.21581	593500.	2960900.	05123124

HIGH 24-Hour

2001	1.42078	593200.	2960500.	01100924
2002	1.31053	593700.	2961600.	02030224
2003	1.42323	593600.	2961200.	03061624
2004	1.71341	594700.	2961600.	04090524
2005	1.54035	593300.	2961200.	05061024

HIGH 8-Hour

2001	3.64061	593300.	2960500.	01100916
2002	3.44793	593700.	2961600.	02030216
2003	3.21116	593600.	2961200.	03062916
2004	5.09675	594700.	2961600.	04090508
2005	3.46574	593300.	2961400.	05102408

HIGH 3-Hour

2001	3.86929	593600.	2960200.	01050615
2002	4.03297	593400.	2961100.	02040812
2003	3.91742	593600.	2961300.	03040812
2004	7.61545	594700.	2961500.	04090503
2005	5.51228	593200.	2961400.	05102406

HIGH 1-Hour

2001	4.31259	593400.	2960800.	01042212
2002	4.59657	593500.	2961100.	02081511
2003	4.48804	595000.	2960600.	03041012
2004	11.39733	594800.	2960500.	04090419
2005	7.75635	593400.	2961300.	05102407

SOURCE GROUP ID: O7595

Annual

2001	0.24533	593400.	2960800.	01123124
2002	0.30704	593500.	2961200.	02123124
2003	0.28910	593600.	2961300.	03123124
2004	0.27807	593500.	2961000.	04123124
2005	0.25666	593500.	2960900.	05123124

HIGH 24-Hour

2001	1.67498	593300.	2960500.	01100924
2002	1.52126	593700.	2961600.	02030224
2003	1.69833	593600.	2961200.	03061624
2004	1.94802	594600.	2961500.	04090524
2005	1.79457	593300.	2961200.	05061024

HIGH 8-Hour

2001	4.24403	593300.	2960500.	01100916
2002	3.96015	593700.	2961600.	02030216
2003	3.80000	593600.	2961200.	03062916
2004	5.72205	594600.	2961500.	04090508
2005	4.25550	593300.	2961400.	05102408

HIGH 3-Hour

2001	4.45101	593600.	2960200.	01050615
2002	4.64841	593400.	2961100.	02040812
2003	4.57531	593600.	2961300.	03040812
2004	8.14770	594700.	2961500.	04090503
2005	6.72214	593300.	2961400.	05102406

HIGH 1-Hour

2001	4.95530	593400.	2960800.	01042212
2002	5.25107	593500.	2961100.	02081511
2003	5.48520	592800.	2961100.	03120323
2004	13.01476	594800.	2960700.	04092520
2005	8.69378	593400.	2961300.	05102407

SOURCE GROUP ID: O7559

Annual

2001	0.22816	593400.	2960800.	01123124
2002	0.28718	593500.	2961200.	02123124
2003	0.27055	593600.	2961300.	03123124
2004	0.25991	593500.	2961000.	04123124
2005	0.23973	593500.	2960900.	05123124

HIGH 24-Hour

	2001	1.55722	593300.	2960500.	01100924
	2002	1.43171	593700.	2961600.	02030224
	2003	1.58398	593600.	2961200.	03061624
	2004	1.83710	594700.	2961600.	04090524
	2005	1.68789	593300.	2961200.	05061024
HIGH	8-Hour				
	2001	3.98066	593300.	2960500.	01100916
	2002	3.74295	593700.	2961600.	02030216
	2003	3.55803	593600.	2961200.	03062916
	2004	5.46055	594700.	2961600.	04090508
	2005	3.93158	593300.	2961400.	05102408
HIGH	3-Hour				
	2001	4.21452	593600.	2960200.	01050615
	2002	4.39937	593400.	2961100.	02040812
	2003	4.30673	593600.	2961300.	03040812
	2004	7.87668	594700.	2961500.	04090503
	2005	6.23526	593200.	2961400.	05102406
HIGH	1-Hour				
	2001	4.70147	593400.	2960800.	01042212
	2002	4.99369	593500.	2961100.	02081511
	2003	4.96706	592800.	2961100.	03120323
	2004	12.25075	594800.	2960700.	04092520
	2005	8.31655	593400.	2961300.	05102407
SOURCE GROUP ID: O7535					
Annual					
	2001	0.21809	593400.	2960800.	01123124
	2002	0.27545	593500.	2961200.	02123124
	2003	0.25958	593600.	2961300.	03123124
	2004	0.24921	593500.	2961000.	04123124
	2005	0.22979	593500.	2960900.	05123124
HIGH	24-Hour				
	2001	1.49546	593200.	2960500.	01100924
	2002	1.38104	593700.	2961600.	02030224
	2003	1.51717	593600.	2961200.	03061624
	2004	1.78310	594700.	2961600.	04090524
	2005	1.62634	593300.	2961200.	05061024
HIGH	8-Hour				
	2001	3.82784	593300.	2960500.	01100916
	2002	3.61981	593700.	2961600.	02030216
	2003	3.41412	593600.	2961200.	03062916
	2004	5.30184	594700.	2961600.	04090508
	2005	3.73417	593300.	2961400.	05102408
HIGH	3-Hour				
	2001	4.07194	593600.	2960200.	01050615
	2002	4.24843	593400.	2961100.	02040812
	2003	4.14559	593600.	2961300.	03040812
	2004	7.87215	594700.	2961500.	04090503
	2005	5.93503	593200.	2961400.	05102406
HIGH	1-Hour				
	2001	4.54607	593400.	2960800.	01042212
	2002	4.83720	593500.	2961100.	02081511
	2003	4.68536	595000.	2960600.	03041012
	2004	11.80292	594900.	2960700.	04092520
	2005	8.06052	593400.	2961300.	05102407

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- LOAD ANALYSIS, MPS 501G1 PLUS OIL 12/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
**********
** ISCST3 Source Pathway
**********
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION OA1095 POINT 594125.983 2960797.999 1.000
  LOCATION OB1095 POINT 594172.071 2960797.963 1.000
  LOCATION OC1095 POINT 594274.233 2960797.946 1.000

  LOCATION OA1059 POINT 594125.983 2960797.999 1.000
  LOCATION OB1059 POINT 594172.071 2960797.963 1.000
  LOCATION OC1059 POINT 594274.233 2960797.946 1.000

  LOCATION OA1035 POINT 594125.983 2960797.999 1.000
  LOCATION OB1035 POINT 594172.071 2960797.963 1.000
  LOCATION OC1035 POINT 594274.233 2960797.946 1.000

  LOCATION OA7595 POINT 594125.983 2960797.999 1.000
  LOCATION OB7595 POINT 594172.071 2960797.963 1.000
  LOCATION OC7595 POINT 594274.233 2960797.946 1.000

  LOCATION OA7559 POINT 594125.983 2960797.999 1.000
  LOCATION OB7559 POINT 594172.071 2960797.963 1.000
  LOCATION OC7559 POINT 594274.233 2960797.946 1.000

  LOCATION OA7535 POINT 594125.983 2960797.999 1.000
  LOCATION OB7535 POINT 594172.071 2960797.963 1.000
  LOCATION OC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F
  SRCPARAM OA1095 3.3333  45.4  452.0  21.2  6.71
  SRCPARAM OB1095 3.3333  45.4  452.0  21.2  6.71
  SRCPARAM OC1095 3.3333  45.4  452.0  21.2  6.71
** Baseload, 59 F
  SRCPARAM OA1059 3.3333  45.4  453.7  23.0  6.71
  SRCPARAM OB1059 3.3333  45.4  453.7  23.0  6.71
  SRCPARAM OC1059 3.3333  45.4  453.7  23.0  6.71
** Baseload, 35 F
  SRCPARAM OA1035 3.3333  45.4  454.8  24.2  6.71
  SRCPARAM OB1035 3.3333  45.4  454.8  24.2  6.71
  SRCPARAM OC1035 3.3333  45.4  454.8  24.2  6.71
** 75% Load, 95 F
  SRCPARAM OA7595 3.3333  45.4  447.0  20.8  6.71
  SRCPARAM OB7595 3.3333  45.4  447.0  20.8  6.71
  SRCPARAM OC7595 3.3333  45.4  447.0  20.8  6.71
** 75% Load, 59 F
  SRCPARAM OA7559 3.3333  45.4  448.7  22.2  6.71
  SRCPARAM OB7559 3.3333  45.4  448.7  22.2  6.71
  SRCPARAM OC7559 3.3333  45.4  448.7  22.2  6.71
** 75% Load, 35 F
  SRCPARAM OA7535 3.3333  45.4  449.8  23.1  6.71
  SRCPARAM OB7535 3.3333  45.4  449.8  23.1  6.71
  SRCPARAM OC7535 3.3333  45.4  449.8  23.1  6.71

** Building Downwash **
SO BUILDHGT OA1035-OA7595   29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595   23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT OA1035-OA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID OA1035-OA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OA1035-OA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OA1035-OA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID OA1035-OA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OA1035-OA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OA1035-OA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN OA1035-OA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OA1035-OA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OA1035-OA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN OA1035-OA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OA1035-OA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OA1035-OA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    OA1035-OA7595   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    OA1035-OA7595   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    OA1035-OA7595    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    OA1035-OA7595     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    OA1035-OA7595    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    OA1035-OA7595   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    OA1035-OA7595   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    OA1035-OA7595   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    OA1035-OA7595   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    OA1035-OA7595     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    OA1035-OA7595    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    OA1035-OA7595    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT OB1035-OB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID OB1035-OB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID OB1035-OB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OB1035-OB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID OB1035-OB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OB1035-OB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OB1035-OB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN OB1035-OB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN OB1035-OB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OB1035-OB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN OB1035-OB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OB1035-OB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OB1035-OB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    OB1035-OB7595   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    OB1035-OB7595   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    OB1035-OB7595    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    OB1035-OB7595     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    OB1035-OB7595    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    OB1035-OB7595   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    OB1035-OB7595   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    OB1035-OB7595    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    OB1035-OB7595   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    OB1035-OB7595     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    OB1035-OB7595     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    OB1035-OB7595    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT OC1035-OC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID OC1035-OC7595    18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID OC1035-OC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OC1035-OC7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID OC1035-OC7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OC1035-OC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OC1035-OC7595    27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN OC1035-OC7595    10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN OC1035-OC7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OC1035-OC7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN OC1035-OC7595    28.87  29.43  29.09  27.87  25.81  22.95
```

```
SO BUILDLEN OC1035-OC7595      19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OC1035-OC7595      25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    OC1035-OC7595     -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    OC1035-OC7595    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    OC1035-OC7595      -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    OC1035-OC7595       4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    OC1035-OC7595      -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    OC1035-OC7595     -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    OC1035-OC7595     -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    OC1035-OC7595      16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    OC1035-OC7595     -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    OC1035-OC7595       3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    OC1035-OC7595      18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    OC1035-OC7595      14.78  12.36   9.56   6.48  14.59   0.08

  SRCGROUP O1095 OA1095 OB1095 OC1095
  SRCGROUP O1059 OA1059 OB1059 OC1059
  SRCGROUP O1035 OA1035 OB1035 OC1035
  SRCGROUP O7595 OA7595 OB7595 OC7595
  SRCGROUP O7559 OA7559 OB7559 OC7559
  SRCGROUP O7535 OA7535 OB7535 OC7535

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
**
RE STARTING
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
  SURFFILE C:\amodmet\PBIMIA01.SFC
  PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENOMPCD.O01
AERMOD OUTPUT FILE NUMBER 2 :GENOMPCD.O02
AERMOD OUTPUT FILE NUMBER 3 :GENOMPCD.O03
AERMOD OUTPUT FILE NUMBER 4 :GENOMPCD.O04
AERMOD OUTPUT FILE NUMBER 5 :GENOMPCD.O05
First title for last output file is: 2001 RBEC- LOAD ANALYSIS, MPS 501G1 PLUS OIL CONDO 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: O1095					
Annual					
	2001	0.32906	594330.	2960240.	01123124
	2002	0.40697	594330.	2960240.	02123124
	2003	0.42043	594330.	2960240.	03123124
	2004	0.40775	594330.	2960240.	04123124
	2005	0.56260	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	4.33430	594330.	2960240.	01110924
	2002	4.17036	594280.	2960240.	02052124
	2003	4.84773	594330.	2960240.	03112924
	2004	5.80364	594330.	2960240.	04090424
	2005	5.74114	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	10.98050	594330.	2960240.	01100308
	2002	7.87347	594330.	2960240.	02011908
	2003	9.69320	594280.	2960240.	03112916
	2004	12.13996	594280.	2960240.	04090408
	2005	12.75221	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	16.40864	594330.	2960240.	01091706
	2002	14.95035	594330.	2960240.	02010821
	2003	18.11278	594280.	2960240.	03111321
	2004	18.52814	594280.	2960240.	04101621
	2005	19.38563	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	26.34845	594280.	2960240.	01122020
	2002	28.97515	594330.	2960240.	02010820
	2003	26.87221	594305.	2960240.	03091124
	2004	27.83878	594280.	2960240.	04021821
	2005	29.55192	594330.	2960240.	05013103
SOURCE GROUP ID: O1059					
Annual					
	2001	0.29396	594330.	2960240.	01123124
	2002	0.36599	594330.	2960240.	02123124
	2003	0.37892	594330.	2960240.	03123124
	2004	0.36848	594330.	2960240.	04123124
	2005	0.50547	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	3.82082	594330.	2960240.	01110924
	2002	3.85368	594280.	2960240.	02052124
	2003	4.48777	594330.	2960240.	03112924
	2004	5.50555	594330.	2960240.	04090424
	2005	5.13568	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	9.57812	594330.	2960240.	01100308
	2002	6.93793	594330.	2960240.	02011908
	2003	9.18326	594280.	2960240.	03112916
	2004	11.22243	594280.	2960240.	04090408
	2005	11.21339	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	14.24995	594330.	2960240.	01091706
	2002	13.14925	594330.	2960240.	02010821
	2003	15.81389	594280.	2960240.	03111321
	2004	16.43958	594330.	2960240.	04090409
	2005	17.03442	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	23.24610	594280.	2960240.	01122020
	2002	25.47622	594330.	2960240.	02010820

2003	23.57153	594305.	2960240.	03091124
2004	24.52559	594280.	2960240.	'04021821
2005	25.97349	594330.	2960240.	05013103

SOURCE GROUP ID: O1035

Annual

2001	0.27362	594330.	2960240.	01123124
2002	0.34204	594330.	2960240.	02123124
2003	0.35470	594330.	2960240.	03123124
2004	0.34560	594330.	2960240.	04123124
2005	0.47247	594330.	2960240.	05123124

HIGH 24-Hour

2001	3.53041	594330.	2960240.	01110924
2002	3.66388	594280.	2960240.	02052124
2003	4.27094	594330.	2960240.	03112924
2004	5.34098	594330.	2960240.	04090424
2005	4.85147	594280.	2960240.	05041524

HIGH 8-Hour

2001	8.78304	594330.	2960240.	01100308
2002	6.41088	594330.	2960240.	02011908
2003	8.86144	594280.	2960240.	03112916
2004	10.73354	594280.	2960240.	04090408
2005	10.34604	594280.	2960240.	05122324

HIGH 3-Hour

2001	13.04632	594330.	2960240.	01091706
2002	12.13492	594330.	2960240.	02010821
2003	14.52722	594280.	2960240.	03111321
2004	15.95928	594330.	2960240.	04090409
2005	15.71088	594280.	2960240.	05122321

HIGH 1-Hour

2001	21.49313	594280.	2960240.	01122020
2002	23.50262	594330.	2960240.	02010820
2003	21.71823	594305.	2960240.	03091124
2004	22.65484	594280.	2960240.	04021821
2005	23.95522	594330.	2960240.	05013103

SOURCE GROUP ID: O7595

Annual

2001	0.34573	594330.	2960240.	01123124
2002	0.42603	594330.	2960240.	02123124
2003	0.43974	594330.	2960240.	03123124
2004	0.42584	594330.	2960240.	04123124
2005	0.58929	594330.	2960240.	05123124

HIGH 24-Hour

2001	4.58866	594330.	2960240.	01110924
2002	4.30542	594280.	2960240.	02052124
2003	4.99327	594330.	2960240.	03112924
2004	5.92610	594330.	2960240.	04090424
2005	6.03129	594330.	2960240.	05102824

HIGH 8-Hour

2001	11.69235	594330.	2960240.	01100308
2002	8.33936	594330.	2960240.	02011908
2003	9.88876	594280.	2960240.	03112916
2004	12.52854	594280.	2960240.	04090408
2005	13.50685	594280.	2960240.	05122324

HIGH 3-Hour

2001	17.52082	594330.	2960240.	01091706
2002	15.81512	594330.	2960240.	02010821
2003	19.29601	594280.	2960240.	03111321
2004	19.62677	594280.	2960240.	04101621
2005	20.54856	594280.	2960240.	05122321

HIGH 1-Hour

2001	27.87562	594280.	2960240.	01122020
2002	30.64408	594330.	2960240.	02010820
2003	28.57920	594305.	2960240.	03091124
2004	29.44338	594280.	2960240.	04021821
2005	31.28383	594330.	2960240.	05013103

SOURCE GROUP ID: O7559

Annual

2001	0.31537	594330.	2960240.	01123124
2002	0.39089	594330.	2960240.	02123124
2003	0.40404	594330.	2960240.	03123124
2004	0.39218	594330.	2960240.	04123124
2005	0.54007	594330.	2960240.	05123124

HIGH 24-Hour

	2001	4.13869	594330.	2960240.	01110924
	2002	4.03974	594280.	2960240.	02052124
	2003	4.69280	594330.	2960240.	03112924
	2004	5.67445	594330.	2960240.	04090424
	2005	5.50785	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	10.45376	594330.	2960240.	01100308
	2002	7.51851	594330.	2960240.	02011908
	2003	9.47590	594280.	2960240.	03112916
	2004	11.72456	594280.	2960240.	04090408
	2005	12.16177	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	15.60829	594330.	2960240.	01091706
	2002	14.24420	594330.	2960240.	02010821
	2003	17.26428	594280.	2960240.	03111321
	2004	17.71712	594280.	2960240.	04101621
	2005	18.49074	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	25.16965	594280.	2960240.	01122020
	2002	27.60078	594330.	2960240.	02010820
	2003	25.66629	594305.	2960240.	03091124
	2004	26.55415	594280.	2960240.	04021821
	2005	28.17740	594330.	2960240.	05013103
SOURCE GROUP ID: O7535					
Annual					
	2001	0.29799	594330.	2960240.	01123124
	2002	0.37059	594330.	2960240.	02123124
	2003	0.38348	594330.	2960240.	03123124
	2004	0.37275	594330.	2960240.	04123124
	2005	0.51180	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	3.88482	594330.	2960240.	01110924
	2002	3.88265	594280.	2960240.	02052124
	2003	4.51436	594330.	2960240.	03112924
	2004	5.52893	594330.	2960240.	04090424
	2005	5.20810	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	9.76056	594330.	2960240.	01100308
	2002	7.05614	594330.	2960240.	02011908
	2003	9.22095	594280.	2960240.	03112916
	2004	11.28153	594280.	2960240.	04090408
	2005	11.40226	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	14.54004	594330.	2960240.	01091706
	2002	13.35698	594330.	2960240.	02010821
	2003	16.12569	594280.	2960240.	03111321
	2004	16.64029	594280.	2960240.	04101621
	2005	17.32911	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	23.63596	594280.	2960240.	01122020
	2002	25.87719	594330.	2960240.	02010820
	2003	24.02934	594305.	2960240.	03091124
	2004	24.91969	594280.	2960240.	04021821
	2005	26.41065	594330.	2960240.	05013103

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

S:\Projects\FPL\REPOWERING APR2008\Riviera\AERMOD\CTLOAD GEN MPS501GPLUS CONDO Dec2008\GENOMPCD.I01

```
CO STARTING
   TITLEONE 2001 RBEC- LOAD ANALYSIS, MPS 501G1 PLUS OIL CONDO 12/31/08
   TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
   MODELOPT DFAULT CONC NOWARN
   AVERTIME PERIOD 24 8 3 1
   POLLUTID GEN
   RUNORNOT RUN
   FLAGPOLE
CO FINISHED
**
**************************************
** ISCST3 Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION OA1095 POINT 594125.983 2960797.999 1.000
   LOCATION OB1095 POINT 594172.071 2960797.963 1.000
   LOCATION OC1095 POINT 594274.233 2960797.946 1.000

   LOCATION OA1059 POINT 594125.983 2960797.999 1.000
   LOCATION OB1059 POINT 594172.071 2960797.963 1.000
   LOCATION OC1059 POINT 594274.233 2960797.946 1.000

   LOCATION OA1035 POINT 594125.983 2960797.999 1.000
   LOCATION OB1035 POINT 594172.071 2960797.963 1.000
   LOCATION OC1035 POINT 594274.233 2960797.946 1.000

   LOCATION OA7595 POINT 594125.983 2960797.999 1.000
   LOCATION OB7595 POINT 594172.071 2960797.963 1.000
   LOCATION OC7595 POINT 594274.233 2960797.946 1.000

   LOCATION OA7559 POINT 594125.983 2960797.999 1.000
   LOCATION OB7559 POINT 594172.071 2960797.963 1.000
   LOCATION OC7559 POINT 594274.233 2960797.946 1.000

   LOCATION OA7535 POINT 594125.983 2960797.999 1.000
   LOCATION OB7535 POINT 594172.071 2960797.963 1.000
   LOCATION OC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F
   SRCPARAM OA1095 3.3333   45.4   452.0   21.2   6.71
   SRCPARAM OB1095 3.3333   45.4   452.0   21.2   6.71
   SRCPARAM OC1095 3.3333   45.4   452.0   21.2   6.71
** Baseload, 59 F
   SRCPARAM OA1059 3.3333   45.4   453.7   23.0   6.71
   SRCPARAM OB1059 3.3333   45.4   453.7   23.0   6.71
   SRCPARAM OC1059 3.3333   45.4   453.7   23.0   6.71
** Baseload, 35 F
   SRCPARAM OA1035 3.3333   45.4   454.8   24.2   6.71
   SRCPARAM OB1035 3.3333   45.4   454.8   24.2   6.71
   SRCPARAM OC1035 3.3333   45.4   454.8   24.2   6.71
** 75% Load, 95 F
   SRCPARAM OA7595 3.3333   45.4   447.0   20.8   6.71
   SRCPARAM OB7595 3.3333   45.4   447.0   20.8   6.71
   SRCPARAM OC7595 3.3333   45.4   447.0   20.8   6.71
** 75% Load, 59 F
   SRCPARAM OA7559 3.3333   45.4   448.7   22.2   6.71
   SRCPARAM OB7559 3.3333   45.4   448.7   22.2   6.71
   SRCPARAM OC7559 3.3333   45.4   448.7   22.2   6.71
** 75% Load, 35 F
   SRCPARAM OA7535 3.3333   45.4   449.8   23.1   6.71
   SRCPARAM OB7535 3.3333   45.4   449.8   23.1   6.71
   SRCPARAM OC7535 3.3333   45.4   449.8   23.1   6.71

** Building Downwash **
SO BUILDHGT OA1035-OA7595      29.57   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OA1035-OA7595      23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OA1035-OA7595      23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OA1035-OA7595      23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OA1035-OA7595      23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OA1035-OA7595      23.47   23.47   23.47   29.57   29.57   29.57
SO BUILDWID OA1035-OA7595      18.85   19.41   22.95   25.81   27.87   29.09
SO BUILDWID OA1035-OA7595      29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID OA1035-OA7595      27.87   25.81   22.95   19.41   15.27   10.67
SO BUILDWID OA1035-OA7595      15.27   19.41   22.95   25.81   27.87   29.09
```

```
SO BUILDWID OA1035-OA7595     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID OA1035-OA7595     27.87   25.81   22.95   19.29   18.85   17.83
SO BUILDLEN OA1035-OA7595     10.39   29.43   29.09   27.87   25.81   22.95
SO BUILDLEN OA1035-OA7595     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OA1035-OA7595     25.81   27.87   29.09   29.43   28.87   27.43
SO BUILDLEN OA1035-OA7595     28.87   29.43   29.09   27.87   25.81   22.95
SO BUILDLEN OA1035-OA7595     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OA1035-OA7595     25.81   27.87   29.09   13.06   10.39    7.41
SO XBADJ    OA1035-OA7595    -87.54  -32.91  -31.26  -28.65  -25.18  -20.94
SO XBADJ    OA1035-OA7595    -16.07  -10.71   -5.02   -3.94   -2.74   -1.46
SO XBADJ    OA1035-OA7595     -0.14    1.19    2.48    3.70    4.80    5.76
SO XBADJ    OA1035-OA7595      4.69    3.48    2.17    0.78   -0.62   -2.01
SO XBADJ    OA1035-OA7595     -3.34   -4.56   -5.65  -11.33  -16.66  -21.49
SO XBADJ    OA1035-OA7595    -25.67  -29.06  -31.57 -100.73  -87.54  -87.32
SO YBADJ    OA1035-OA7595    -14.51   -6.96  -10.01  -12.76  -15.13  -17.03
SO YBADJ    OA1035-OA7595    -18.41  -19.24  -19.48  -19.13  -18.20  -16.71
SO YBADJ    OA1035-OA7595    -14.72  -12.28   -9.46   -6.36   -3.07    0.32
SO YBADJ    OA1035-OA7595      3.69    6.96   10.01   12.76   15.13   17.03
SO YBADJ    OA1035-OA7595     18.41   19.24   19.48   19.13   18.20   16.71
SO YBADJ    OA1035-OA7595     14.72   12.28    9.46  -14.45   14.53    0.01

SO BUILDHGT OB1035-OB7595     29.57   29.57   29.57   23.47   23.47   23.47
SO BUILDHGT OB1035-OB7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OB1035-OB7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OB1035-OB7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OB1035-OB7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OB1035-OB7595     23.47   23.47   23.47   23.17   29.57   29.57
SO BUILDWID OB1035-OB7595     18.85   19.29   19.15   25.81   27.87   29.09
SO BUILDWID OB1035-OB7595     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID OB1035-OB7595     27.87   25.81   22.95   19.41   15.27   10.67
SO BUILDWID OB1035-OB7595     15.27   19.41   22.95   25.81   27.87   29.09
SO BUILDWID OB1035-OB7595     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID OB1035-OB7595     27.87   25.81   22.95   27.91   18.85   17.83
SO BUILDLEN OB1035-OB7595     10.39   13.06   15.33   27.87   25.81   22.95
SO BUILDLEN OB1035-OB7595     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OB1035-OB7595     25.81   27.87   29.09   29.43   28.87   27.43
SO BUILDLEN OB1035-OB7595     28.87   29.43   29.09   27.87   25.81   22.95
SO BUILDLEN OB1035-OB7595     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OB1035-OB7595     25.81   27.87   29.09   47.73   10.39    7.41
SO XBADJ    OB1035-OB7595    -87.51 -100.83 -103.09  -58.25  -60.46  -60.84
SO XBADJ    OB1035-OB7595    -59.36  -56.09  -51.10   -4.13   -2.91   -1.59
SO XBADJ    OB1035-OB7595     -0.23    1.14    2.48    3.74    4.89    5.88
SO XBADJ    OB1035-OB7595      4.85    3.67    2.38   30.38   34.66   37.88
SO XBADJ    OB1035-OB7595     39.96   40.82   40.44  -11.14  -16.50  -21.36
SO XBADJ    OB1035-OB7595    -25.58  -29.01  -31.57 -109.53  -87.41  -87.24
SO YBADJ    OB1035-OB7595    -14.22   14.74   -1.86   22.56   14.53    6.05
SO YBADJ    OB1035-OB7595     -2.62  -11.20  -19.44  -19.29  -18.38  -16.92
SO YBADJ    OB1035-OB7595    -14.95  -12.52   -9.71   -6.61   -3.31    0.10
SO YBADJ    OB1035-OB7595      3.50    6.80    9.89  -22.56  -14.53   -6.05
SO YBADJ    OB1035-OB7595      2.62   11.20   19.44   19.29   18.38   16.92
SO YBADJ    OB1035-OB7595     14.95   12.52    9.71  -23.01   14.79    0.29

SO BUILDHGT OC1035-OC7595     29.57   23.17   23.17   23.47   23.47   23.47
SO BUILDHGT OC1035-OC7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OC1035-OC7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OC1035-OC7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OC1035-OC7595     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT OC1035-OC7595     23.47   23.47   23.47   23.47   29.57   29.57
SO BUILDWID OC1035-OC7595     18.85   27.91   34.24   25.81   27.87   29.09
SO BUILDWID OC1035-OC7595     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID OC1035-OC7595     27.87   25.81   22.95   19.41   15.27   10.67
SO BUILDWID OC1035-OC7595     15.27   19.41   22.95   25.81   27.87   29.09
SO BUILDWID OC1035-OC7595     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID OC1035-OC7595     27.87   25.81   22.95   19.41   18.85   17.83
SO BUILDLEN OC1035-OC7595     10.39   47.73   46.38   27.87   25.81   22.95
SO BUILDLEN OC1035-OC7595     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OC1035-OC7595     25.81   27.87   29.09   29.43   28.87   27.43
SO BUILDLEN OC1035-OC7595     28.87   29.43   29.09   27.87   25.81   22.95
SO BUILDLEN OC1035-OC7595     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OC1035-OC7595     25.81   27.87   29.09   29.43   10.39    7.41
SO XBADJ    OC1035-OC7595    -87.49 -109.62 -111.69  -28.71  -25.26  -21.04
SO XBADJ    OC1035-OC7595   -112.31 -111.55 -107.40   -4.08   -2.88   -1.60
SO XBADJ    OC1035-OC7595     -0.27    1.08    2.38    3.62    4.75    5.73
SO XBADJ    OC1035-OC7595      4.68    3.50    2.20    0.84   -0.54   -1.91
SO XBADJ    OC1035-OC7595     -3.22   -4.44   -5.52  -11.19  -16.52  -21.36
SO XBADJ    OC1035-OC7595    -25.54  -28.95  -31.47  -33.05  -87.46  -87.25
SO YBADJ    OC1035-OC7595    -14.43   23.32    8.08  -12.64  -15.01  -16.93
SO YBADJ    OC1035-OC7595     16.51   -1.56  -19.58  -19.12  -18.21  -16.75
SO YBADJ    OC1035-OC7595    -14.78  -12.36   -9.56   -6.48   -3.20    0.18
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SO YBADJ     OC1035-OC7595         3.56    6.82    9.88   12.64   15.01   16.93
SO YBADJ     OC1035-OC7595        18.33   19.18   19.44   19.12   18.21   16.75
SO YBADJ     OC1035-OC7595        14.78   12.36    9.56    6.48   14.59    0.08

   SRCGROUP O1095 OA1095 OB1095 OC1095
   SRCGROUP O1059 OA1059 OB1059 OC1059
   SRCGROUP O1035 OA1035 OB1035 OC1035
   SRCGROUP O7595 OA7595 OB7595 OC7595
   SRCGROUP O7559 OA7559 OB7559 OC7559
   SRCGROUP O7535 OA7535 OB7535 OC7535

SO FINISHED
**
**********************************
** ISCST3 Receptor Pathway
**********************************
**
**
RE STARTING
   INCLUDED RIV1COND.ROU
RE FINISHED
**
**********************************
** AERMOD Meteorology Pathway
**********************************
**
**
ME STARTING
   SURFFILE C:\amodmet\PBIMIA01.SFC
   PROFFILE C:\amodmet\PBIMIA01.PFL
   SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
   UAIRDATA 92803 2001 MIAMI/FIU
   PROFBASE 19 FEET
ME FINISHED
**
**********************************
** AERMOD Output Pathway
**********************************
**
**
OU STARTING
   RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENOIL.O01
AERMOD OUTPUT FILE NUMBER 2 :GENOIL.O02
AERMOD OUTPUT FILE NUMBER 3 :GENOIL.O03
AERMOD OUTPUT FILE NUMBER 4 :GENOIL.O04
AERMOD OUTPUT FILE NUMBER 5 :GENOIL.O05
First title for last output file is: 2001 RBEC- CT LOAD ANALYSIS, SIEMENS OIL 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: O1095					
Annual					
	2001	0.24665	593400.	2960800.	01123124
	2002	0.30844	593500.	2961200.	02123124
	2003	0.29041	593600.	2961300.	03123124
	2004	0.27949	593500.	2961000.	04123124
	2005	0.25800	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	1.69281	593300.	2960500.	01100924
	2002	1.53265	593700.	2961600.	02030224
	2003	1.70708	593600.	2961200.	03061624
	2004	1.96836	594600.	2961500.	04090524
	2005	1.80761	593300.	2961200.	05061024
HIGH 8-Hour					
	2001	4.28577	593300.	2960500.	01100916
	2002	3.98878	593700.	2961600.	02030216
	2003	3.82013	593600.	2961200.	03062916
	2004	5.77967	594600.	2961500.	04090508
	2005	4.30084	593300.	2961400.	05102408
HIGH 3-Hour					
	2001	4.47324	593600.	2960200.	01050615
	2002	4.67208	593400.	2961100.	02040812
	2003	4.60030	593600.	2961300.	03040812
	2004	8.20234	594700.	2961500.	04090503
	2005	6.79428	593300.	2961400.	05102406
HIGH 1-Hour					
	2001	4.97870	593400.	2960800.	01042212
	2002	5.27488	593500.	2961100.	02081511
	2003	5.55243	592800.	2961100.	03120323
	2004	13.15354	594800.	2960700.	04092520
	2005	8.76054	593400.	2961300.	05102407
SOURCE GROUP ID: O1059					
Annual					
	2001	0.22172	593400.	2960800.	01123124
	2002	0.27959	593500.	2961200.	02123124
	2003	0.26346	593600.	2961300.	03123124
	2004	0.25310	593500.	2961000.	04123124
	2005	0.23339	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	1.52109	593200.	2960500.	01100924
	2002	1.40065	593700.	2961600.	02030224
	2003	1.54130	593600.	2961200.	03061624
	2004	1.80820	594700.	2961600.	04090524
	2005	1.65081	593300.	2961200.	05061024
HIGH 8-Hour					
	2001	3.89782	593300.	2960500.	01100916
	2002	3.66768	593700.	2961600.	02030216
	2003	3.46781	593600.	2961200.	03062916
	2004	5.37539	594700.	2961600.	04090508
	2005	3.82346	593300.	2961400.	05102408
HIGH 3-Hour					
	2001	4.12749	593600.	2960200.	01050615
	2002	4.30734	593400.	2961100.	02040812
	2003	4.20789	593600.	2961300.	03040812
	2004	7.77748	594700.	2961500.	04090503
	2005	6.06867	593200.	2961400.	05102406
HIGH 1-Hour					
	2001	4.60922	593400.	2960800.	01042212
	2002	4.89895	593500.	2961100.	02081511

2003	4.78643	592800.	2961100.	03120323
2004	12.01661	594800.	2960700.	04092520
2005	8.19739	593400.	2961300.	05102407

SOURCE GROUP ID: O1035

Annual

2001	0.20846	593400.	2960800.	01123124
2002	0.26408	593500.	2961200.	02123124
2003	0.24896	593600.	2961300.	03123124
2004	0.23899	593500.	2961000.	04123124
2005	0.22028	593500.	2960900.	05123124

HIGH 24-Hour

2001	1.44421	593200.	2960500.	01100924
2002	1.33394	593700.	2961600.	02030224
2003	1.45330	593600.	2961200.	03061624
2004	1.74164	594700.	2961600.	04090524
2005	1.56853	593300.	2961200.	05061024

HIGH 8-Hour

2001	3.69983	593300.	2960500.	01100916
2002	3.50534	593700.	2961600.	02030216
2003	3.27687	593600.	2961200.	03062916
2004	5.18014	594700.	2961600.	04090508
2005	3.55536	593300.	2961400.	05102408

HIGH 3-Hour

2001	3.93615	593600.	2960200.	01050615
2002	4.10467	593400.	2961100.	02040812
2003	3.99236	593600.	2961300.	03040812
2004	7.71003	594700.	2961500.	04090503
2005	5.65973	593200.	2961400.	05102406

HIGH 1-Hour

2001	4.39145	593400.	2960800.	01042212
2002	4.67575	593500.	2961100.	02081511
2003	4.55669	595000.	2960600.	03041012
2004	11.48886	594900.	2960700.	04092520
2005	7.81776	593400.	2961300.	05102407

SOURCE GROUP ID: O7595

Annual

2001	0.30571	593400.	2960800.	01123124
2002	0.37829	593600.	2961100.	02123124
2003	0.35195	593600.	2961300.	03123124
2004	0.34087	593500.	2960900.	04123124
2005	0.31660	593500.	2960900.	05123124

HIGH 24-Hour

2001	2.16598	593300.	2960500.	01100924
2002	1.86778	593700.	2961600.	02030224
2003	2.09280	593600.	2961200.	03061624
2004	2.28699	594600.	2961500.	04090524
2005	2.19384	593300.	2961200.	05061024

HIGH 8-Hour

2001	5.19559	593300.	2960500.	01100916
2002	4.76927	593700.	2961600.	02030216
2003	4.60883	593600.	2961200.	03062916
2004	6.67901	594600.	2961500.	04090508
2005	5.24632	593400.	2961400.	05102408

HIGH 3-Hour

2001	5.37502	594900.	2960600.	01091515
2002	5.50206	593400.	2961100.	02040812
2003	5.51827	593600.	2961300.	03040812
2004	8.73881	594900.	2961000.	04092524
2005	8.23596	593400.	2961300.	05102406

HIGH 1-Hour

2001	6.08299	595000.	2960500.	01060116
2002	6.10484	593500.	2961100.	02081511
2003	7.35656	593100.	2961000.	03120323
2004	15.25920	594800.	2960700.	04092520
2005	9.81945	593400.	2961300.	05102407

SOURCE GROUP ID: O7559

Annual

2001	0.28071	593400.	2960800.	01123124
2002	0.34879	593600.	2961100.	02123124
2003	0.32635	593600.	2961300.	03123124
2004	0.31501	593500.	2961000.	04123124
2005	0.29180	593500.	2960900.	05123124

HIGH 24-Hour

2001	1.95385	593300.	2960500.	01100924
2002	1.71770	593700.	2961600.	02030224
2003	1.93210	593600.	2961200.	03061624
2004	2.14425	594600.	2961500.	04090524
2005	2.02754	593300.	2961200.	05061024

HIGH 8-Hour

2001	4.80864	593300.	2960500.	01100916
2002	4.42686	593700.	2961600.	02030216
2003	4.28307	593600.	2961200.	03062916
2004	6.27612	594600.	2961500.	04090508
2005	4.82023	593300.	2961400.	05102408

HIGH 3-Hour

2001	4.97448	593300.	2960500.	01100912
2002	5.13019	593400.	2961100.	02040812
2003	5.11250	593600.	2961300.	03040812
2004	8.44241	594700.	2961500.	04090503
2005	7.49624	593300.	2961400.	05102406

HIGH 1-Hour

2001	5.58058	595000.	2960500.	01060116
2002	5.74834	593500.	2961100.	02081511
2003	6.53123	592900.	2961100.	03120323
2004	14.44942	594800.	2960700.	04092520
2005	9.41931	593400.	2961300.	05102407

SOURCE GROUP ID: O7535

Annual

2001	0.26736	593400.	2960800.	01123124
2002	0.33298	593600.	2961100.	02123124
2003	0.31240	593600.	2961300.	03123124
2004	0.30117	593500.	2961000.	04123124
2005	0.27853	593500.	2960900.	05123124

HIGH 24-Hour

2001	1.84667	593300.	2960500.	01100924
2002	1.64463	593700.	2961600.	02030224
2003	1.84460	593600.	2961200.	03061624
2004	2.06164	594600.	2961500.	04090524
2005	1.93893	593300.	2961200.	05061024

HIGH 8-Hour

2001	4.60230	593300.	2960500.	01100916
2002	4.25562	593700.	2961600.	02030216
2003	4.10426	593600.	2961200.	03062916
2004	6.04098	594600.	2961500.	04090508
2005	4.68214	593300.	2961400.	05102408

HIGH 3-Hour

2001	4.75575	593300.	2960500.	01100912
2002	4.95206	593400.	2961100.	02040812
2003	4.91372	593600.	2961300.	03040812
2004	8.27577	594700.	2961500.	04090503
2005	7.47548	593400.	2961300.	05102406

HIGH 1-Hour

2001	5.28527	595000.	2960500.	01060116
2002	5.57216	593500.	2961100.	02081511
2003	6.14553	592900.	2961100.	03120323
2004	13.96901	594800.	2960700.	04092520
2005	9.17644	593400.	2961300.	05102407

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- CT LOAD ANALYSIS, SIEMENS OIL 12/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION OA1095 POINT 594125.983 2960797.999 1.000
  LOCATION OB1095 POINT 594172.071 2960797.963 1.000
  LOCATION OC1095 POINT 594274.233 2960797.946 1.000

  LOCATION OA1059 POINT 594125.983 2960797.999 1.000
  LOCATION OB1059 POINT 594172.071 2960797.963 1.000
  LOCATION OC1059 POINT 594274.233 2960797.946 1.000

  LOCATION OA1035 POINT 594125.983 2960797.999 1.000
  LOCATION OB1035 POINT 594172.071 2960797.963 1.000
  LOCATION OC1035 POINT 594274.233 2960797.946 1.000

  LOCATION OA7595 POINT 594125.983 2960797.999 1.000
  LOCATION OB7595 POINT 594172.071 2960797.963 1.000
  LOCATION OC7595 POINT 594274.233 2960797.946 1.000

  LOCATION OA7559 POINT 594125.983 2960797.999 1.000
  LOCATION OB7559 POINT 594172.071 2960797.963 1.000
  LOCATION OC7559 POINT 594274.233 2960797.946 1.000

  LOCATION OA7535 POINT 594125.983 2960797.999 1.000
  LOCATION OB7535 POINT 594172.071 2960797.963 1.000
  LOCATION OC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F
  SRCPARAM OA1095 3.3333  45.4  452.0  20.31 6.71
  SRCPARAM OB1095 3.3333  45.4  452.0  20.31 6.71
  SRCPARAM OC1095 3.3333  45.4  452.0  20.31 6.71
** Baseload, 59 F
  SRCPARAM OA1059 3.3333  45.4  453.7  22.42 6.71
  SRCPARAM OB1059 3.3333  45.4  453.7  22.42 6.71
  SRCPARAM OC1059 3.3333  45.4  453.7  22.42 6.71
** Baseload, 35 F
  SRCPARAM OA1035 3.3333  45.4  454.8  23.70 6.71
  SRCPARAM OB1035 3.3333  45.4  454.8  23.70 6.71
  SRCPARAM OC1035 3.3333  45.4  454.8  23.70 6.71
** 75% Load, 95 F
  SRCPARAM OA7595 3.3333  45.4  447.0  16.63 6.71
  SRCPARAM OB7595 3.3333  45.4  447.0  16.63 6.71
  SRCPARAM OC7595 3.3333  45.4  447.0  16.63 6.71
** 75% Load, 59 F
  SRCPARAM OA7559 3.3333  45.4  448.7  18.04 6.71
  SRCPARAM OB7559 3.3333  45.4  448.7  18.04 6.71
  SRCPARAM OC7559 3.3333  45.4  448.7  18.04 6.71
** 75% Load, 35 F
  SRCPARAM OA7535 3.3333  45.4  449.8  18.88 6.71
  SRCPARAM OB7535 3.3333  45.4  449.8  18.88 6.71
  SRCPARAM OC7535 3.3333  45.4  449.8  18.88 6.71

** Building Downwash **
SO BUILDHGT OA1035-OA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595    23.47  23.47  23.47  23.47  23.47  23.47
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SO BUILDHGT OA1035-OA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID OA1035-OA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OA1035-OA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OA1035-OA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID OA1035-OA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OA1035-OA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OA1035-OA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN OA1035-OA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OA1035-OA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OA1035-OA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN OA1035-OA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OA1035-OA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OA1035-OA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    OA1035-OA7595   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    OA1035-OA7595   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    OA1035-OA7595    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    OA1035-OA7595     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    OA1035-OA7595    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    OA1035-OA7595   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    OA1035-OA7595   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    OA1035-OA7595   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    OA1035-OA7595   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    OA1035-OA7595     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    OA1035-OA7595    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    OA1035-OA7595    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT OB1035-OB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OB1035-OB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID OB1035-OB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID OB1035-OB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OB1035-OB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID OB1035-OB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OB1035-OB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OB1035-OB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN OB1035-OB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN OB1035-OB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OB1035-OB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN OB1035-OB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OB1035-OB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OB1035-OB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    OB1035-OB7595   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    OB1035-OB7595   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    OB1035-OB7595    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    OB1035-OB7595     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    OB1035-OB7595    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    OB1035-OB7595   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    OB1035-OB7595   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    OB1035-OB7595    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    OB1035-OB7595   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    OB1035-OB7595     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    OB1035-OB7595     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    OB1035-OB7595    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT OC1035-OC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OC1035-OC7595    23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID OC1035-OC7595    18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID OC1035-OC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OC1035-OC7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID OC1035-OC7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID OC1035-OC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID OC1035-OC7595    27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN OC1035-OC7595    10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN OC1035-OC7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OC1035-OC7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN OC1035-OC7595    28.87  29.43  29.09  27.87  25.81  22.95
```

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SO BUILDLEN OC1035-OC7595      19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN OC1035-OC7595      25.81   27.87   29.09   29.43   10.39    7.41
SO XBADJ    OC1035-OC7595     -87.49 -109.62 -111.69  -28.71  -25.26  -21.04
SO XBADJ    OC1035-OC7595    -112.31 -111.55 -107.40   -4.08   -2.88   -1.60
SO XBADJ    OC1035-OC7595      -0.27    1.08    2.38    3.62    4.75    5.73
SO XBADJ    OC1035-OC7595       4.68    3.50    2.20    0.84   -0.54   -1.91
SO XBADJ    OC1035-OC7595      -3.22   -4.44   -5.52  -11.19  -16.52  -21.36
SO XBADJ    OC1035-OC7595     -25.54  -28.95  -31.47  -33.05  -87.46  -87.25
SO YBADJ    OC1035-OC7595     -14.43   23.32    8.08  -12.64  -15.01  -16.93
SO YBADJ    OC1035-OC7595      16.51   -1.56  -19.58  -19.12  -18.21  -16.75
SO YBADJ    OC1035-OC7595     -14.78  -12.36   -9.56   -6.48   -3.20    0.18
SO YBADJ    OC1035-OC7595       3.56    6.82    9.88   12.64   15.01   16.93
SO YBADJ    OC1035-OC7595      18.33   19.18   19.44   19.12   18.21   16.75
SO YBADJ    OC1035-OC7595      14.78   12.36    9.56    6.48   14.59    0.08

  SRCGROUP O1095 OA1095 OB1095 OC1095
  SRCGROUP O1059 OA1059 OB1059 OC1059
  SRCGROUP O1035 OA1035 OB1035 OC1035
  SRCGROUP O7595 OA7595 OB7595 OC7595
  SRCGROUP O7559 OA7559 OB7559 OC7559
  SRCGROUP O7535 OA7535 OB7535 OC7535

SO FINISHED
**
**********************************************
** ISCST3 Receptor Pathway
**********************************************
**
**
RE STARTING
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********************************************
** AERMOD Meteorology Pathway
**********************************************
**
**
ME STARTING
**   SURFFILE C:\amodmet\PBIMIA01.SFC
**   PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********************************************
** AERMOD Output Pathway
**********************************************
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENOILCD.O01
AERMOD OUTPUT FILE NUMBER 2 :GENOILCD.O02
AERMOD OUTPUT FILE NUMBER 3 :GENOILCD.O03
AERMOD OUTPUT FILE NUMBER 4 :GENOILCD.O04
AERMOD OUTPUT FILE NUMBER 5 :GENOILCD.O05
First title for last output file is: 2001 RBEC- CT LOAD ANALYSIS, SIEMENS OIL CONDO 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATES FOR CC CTS

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: O1095					
Annual					
	2001	0.34755	594330.	2960240.	01123124
	2002	0.42834	594330.	2960240.	02123124
	2003	0.44221	594330.	2960240.	03123124
	2004	0.42831	594330.	2960240.	04123124
	2005	0.59259	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	4.60748	594330.	2960240.	01110924
	2002	4.33258	594280.	2960240.	02052124
	2003	5.03281	594330.	2960240.	03112924
	2004	5.97071	594330.	2960240.	04090424
	2005	6.05822	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	11.73131	594330.	2960240.	01100308
	2002	8.37180	594330.	2960240.	02011908
	2003	9.94386	594280.	2960240.	03112916
	2004	12.69438	594280.	2960240.	04090408
	2005	13.56869	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	17.56446	594330.	2960240.	01091706
	2002	15.90954	594330.	2960240.	02010821
	2003	19.33850	594280.	2960240.	03111321
	2004	19.68215	594280.	2960240.	04101621
	2005	20.63342	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	27.98653	594280.	2960240.	01122020
	2002	30.83085	594330.	2960240.	02010820
	2003	28.62420	594305.	2960240.	03091124
	2004	29.59849	594280.	2960240.	04021821
	2005	31.43045	594330.	2960240.	05013103
SOURCE GROUP ID: O1059					
Annual					
	2001	0.30380	594330.	2960240.	01123124
	2002	0.37755	594330.	2960240.	02123124
	2003	0.39062	594330.	2960240.	03123124
	2004	0.37958	594330.	2960240.	04123124
	2005	0.52152	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	3.96267	594330.	2960240.	01110924
	2002	3.94498	594280.	2960240.	02052124
	2003	4.59232	594330.	2960240.	03112924
	2004	5.59281	594330.	2960240.	04090424
	2005	5.30454	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	9.96260	594330.	2960240.	01100308
	2002	7.19585	594330.	2960240.	02011908
	2003	9.33515	594280.	2960240.	03112916
	2004	11.47749	594280.	2960240.	04090408
	2005	11.63866	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	14.83981	594330.	2960240.	01091706
	2002	13.64846	594330.	2960240.	02010821
	2003	16.44283	594280.	2960240.	03111321
	2004	16.95167	594280.	2960240.	04101621
	2005	17.68277	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	24.10302	594280.	2960240.	01122020
	2002	26.44713	594330.	2960240.	02010820

2003	24.47463	594305.	2960240.	03091124
2004	25.44345	594280.	2960240.	04021821
2005	26.96277	594330.	2960240.	05013103

SOURCE GROUP ID: O1035

Annual

2001	0.28122	594330.	2960240.	01123124
2002	0.35103	594330.	2960240.	02123124
2003	0.36378	594330.	2960240.	03123124
2004	0.35420	594330.	2960240.	04123124
2005	0.48479	594330.	2960240.	05123124

HIGH 24-Hour

2001	3.63724	594330.	2960240.	01110924
2002	3.73621	594280.	2960240.	02052124
2003	4.35413	594330.	2960240.	03112924
2004	5.40211	594330.	2960240.	04090424
2005	4.95767	594280.	2960240.	05041524

HIGH 8-Hour

2001	9.07808	594330.	2960240.	01100308
2002	6.60485	594330.	2960240.	02011908
2003	8.98660	594280.	2960240.	03112916
2004	10.92503	594280.	2960240.	04090408
2005	10.66584	594280.	2960240.	05122324

HIGH 3-Hour

2001	13.48625	594330.	2960240.	01091706
2002	12.51019	594330.	2960240.	02010821
2003	14.99769	594280.	2960240.	03111321
2004	16.12373	594330.	2960240.	04090409
2005	16.19810	594280.	2960240.	05122321

HIGH 1-Hour

2001	22.13895	594280.	2960240.	01122020
2002	24.23334	594330.	2960240.	02010820
2003	22.39548	594305.	2960240.	03091124
2004	23.34621	594280.	2960240.	04021821
2005	24.69971	594330.	2960240.	05013103

SOURCE GROUP ID: O7595

Annual

2001	0.45829	594330.	2960240.	01123124
2002	0.55425	594330.	2960240.	02123124
2003	0.57024	594330.	2960240.	03123124
2004	0.54838	594330.	2960240.	04123124
2005	0.76899	594330.	2960240.	05123124

HIGH 24-Hour

2001	6.26863	594330.	2960240.	01110924
2002	5.21820	594280.	2960240.	02052124
2003	6.08537	594330.	2960240.	03021324
2004	6.69429	594330.	2960240.	04090424
2005	7.95496	594330.	2960240.	05102824

HIGH 8-Hour

2001	16.36080	594330.	2960240.	01100308
2002	11.44387	594330.	2960240.	02011908
2003	11.59781	594305.	2960240.	03122708
2004	16.86885	594280.	2960240.	04101624
2005	18.60813	594280.	2960240.	05122324

HIGH 3-Hour

2001	24.61525	594330.	2960240.	01091706
2002	21.80577	594330.	2960240.	02010821
2003	26.99939	594280.	2960240.	03111321
2004	26.89057	594280.	2960240.	04101621
2005	28.39123	594280.	2960240.	05122321

HIGH 1-Hour

2001	38.09757	594280.	2960240.	01122020
2002	42.13459	594330.	2960240.	02010820
2003	39.70973	594305.	2960240.	03091124
2004	40.40978	594280.	2960240.	04021821
2005	42.99567	594330.	2960240.	05013103

SOURCE GROUP ID: O7559

Annual

2001	0.41113	594330.	2960240.	01123124
2002	0.50051	594330.	2960240.	02123124
2003	0.51556	594330.	2960240.	03123124
2004	0.49740	594330.	2960240.	04123124
2005	0.69404	594330.	2960240.	05123124

HIGH 24-Hour

	2001	5.57283	594330.	2960240.	01110924
	2002	4.84842	594280.	2960240.	02052124
	2003	5.61444	594330.	2960240.	03112924
	2004	6.42667	594330.	2960240.	04090424
	2005	7.14348	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	14.43128	594330.	2960240.	01100308
	2002	10.13720	594330.	2960240.	02011908
	2003	10.68985	594280.	2960240.	03112916
	2004	14.88237	594280.	2960240.	04101624
	2005	16.41219	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	21.69840	594330.	2960240.	01091706
	2002	19.21901	594330.	2960240.	02010821
	2003	23.73273	594280.	2960240.	03111321
	2004	23.73307	594280.	2960240.	04101621
	2005	24.98915	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	33.67809	594280.	2960240.	01122020
	2002	37.18736	594330.	2960240.	02010820
	2003	34.83423	594305.	2960240.	03091124
	2004	35.67974	594280.	2960240.	04021821
	2005	37.93665	594330.	2960240.	05013103
SOURCE GROUP ID: O7535					
Annual					
	2001	0.38571	594330.	2960240.	01123124
	2002	0.47188	594330.	2960240.	02123124
	2003	0.48647	594330.	2960240.	03123124
	2004	0.47002	594330.	2960240.	04123124
	2005	0.65390	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	5.18655	594330.	2960240.	01110924
	2002	4.64774	594280.	2960240.	02052124
	2003	5.38688	594330.	2960240.	03112924
	2004	6.26129	594330.	2960240.	04090424
	2005	6.71430	594330.	2960240.	05102824
HIGH 8-Hour					
	2001	13.36972	594330.	2960240.	01100308
	2002	9.41746	594330.	2960240.	02011908
	2003	10.40176	594280.	2960240.	03112916
	2004	13.84067	594280.	2960240.	04101624
	2005	15.27572	594280.	2960240.	05122324
HIGH 3-Hour					
	2001	20.09216	594330.	2960240.	01091706
	2002	17.89094	594330.	2960240.	02010821
	2003	21.99188	594280.	2960240.	03111321
	2004	22.10868	594280.	2960240.	04101621
	2005	23.24275	594280.	2960240.	05122321
HIGH 1-Hour					
	2001	31.39972	594280.	2960240.	01122020
	2002	34.64006	594330.	2960240.	02010820
	2003	32.33950	594305.	2960240.	03091124
	2004	33.24362	594280.	2960240.	04021821
	2005	35.33056	594330.	2960240.	05013103

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- CT LOAD ANALYSIS, SIEMENS OIL CONDO 12/31/08
  TITLETWO GENERIC (10 g/s) EMISSION RATES FOR CC CTS
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 8 3 1
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION OA1095 POINT 594125.983 2960797.999 1.000
  LOCATION OB1095 POINT 594172.071 2960797.963 1.000
  LOCATION OC1095 POINT 594274.233 2960797.946 1.000

  LOCATION OA1059 POINT 594125.983 2960797.999 1.000
  LOCATION OB1059 POINT 594172.071 2960797.963 1.000
  LOCATION OC1059 POINT 594274.233 2960797.946 1.000

  LOCATION OA1035 POINT 594125.983 2960797.999 1.000
  LOCATION OB1035 POINT 594172.071 2960797.963 1.000
  LOCATION OC1035 POINT 594274.233 2960797.946 1.000

  LOCATION OA7595 POINT 594125.983 2960797.999 1.000
  LOCATION OB7595 POINT 594172.071 2960797.963 1.000
  LOCATION OC7595 POINT 594274.233 2960797.946 1.000

  LOCATION OA7559 POINT 594125.983 2960797.999 1.000
  LOCATION OB7559 POINT 594172.071 2960797.963 1.000
  LOCATION OC7559 POINT 594274.233 2960797.946 1.000

  LOCATION OA7535 POINT 594125.983 2960797.999 1.000
  LOCATION OB7535 POINT 594172.071 2960797.963 1.000
  LOCATION OC7535 POINT 594274.233 2960797.946 1.000

** Source Parameters **
** Baseload, 95 F
  SRCPARAM OA1095 3.3333  45.4  452.0  20.31 6.71
  SRCPARAM OB1095 3.3333  45.4  452.0  20.31 6.71
  SRCPARAM OC1095 3.3333  45.4  452.0  20.31 6.71
** Baseload, 59 F
  SRCPARAM OA1059 3.3333  45.4  453.7  22.42 6.71
  SRCPARAM OB1059 3.3333  45.4  453.7  22.42 6.71
  SRCPARAM OC1059 3.3333  45.4  453.7  22.42 6.71
** Baseload, 35 F
  SRCPARAM OA1035 3.3333  45.4  454.8  23.70 6.71
  SRCPARAM OB1035 3.3333  45.4  454.8  23.70 6.71
  SRCPARAM OC1035 3.3333  45.4  454.8  23.70 6.71
** 75% Load, 95 F
  SRCPARAM OA7595 3.3333  45.4  447.0  16.63 6.71
  SRCPARAM OB7595 3.3333  45.4  447.0  16.63 6.71
  SRCPARAM OC7595 3.3333  45.4  447.0  16.63 6.71
** 75% Load, 59 F
  SRCPARAM OA7559 3.3333  45.4  448.7  18.04 6.71
  SRCPARAM OB7559 3.3333  45.4  448.7  18.04 6.71
  SRCPARAM OC7559 3.3333  45.4  448.7  18.04 6.71
** 75% Load, 35 F
  SRCPARAM OA7535 3.3333  45.4  449.8  18.88 6.71
  SRCPARAM OB7535 3.3333  45.4  449.8  18.88 6.71
  SRCPARAM OC7535 3.3333  45.4  449.8  18.88 6.71

** Building Downwash **
SO BUILDHGT OA1035-OA7595     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT OA1035-OA7595     23.47  23.47  23.47  23.47  23.47  23.47
```

SO BUILDHGT	OA1035-OA7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OA1035-OA7595	23.47	23.47	23.47	29.57	29.57	29.57
SO BUILDWID	OA1035-OA7595	18.85	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	OA1035-OA7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	OA1035-OA7595	27.87	25.81	22.95	19.41	15.27	10.67
SO BUILDWID	OA1035-OA7595	15.27	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	OA1035-OA7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	OA1035-OA7595	27.87	25.81	22.95	19.29	18.85	17.83
SO BUILDLEN	OA1035-OA7595	10.39	29.43	29.09	27.87	25.81	22.95
SO BUILDLEN	OA1035-OA7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	OA1035-OA7595	25.81	27.87	29.09	29.43	28.87	27.43
SO BUILDLEN	OA1035-OA7595	28.87	29.43	29.09	27.87	25.81	22.95
SO BUILDLEN	OA1035-OA7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	OA1035-OA7595	25.81	27.87	29.09	13.06	10.39	7.41
SO XBADJ	OA1035-OA7595	-87.54	-32.91	-31.26	-28.65	-25.18	-20.94
SO XBADJ	OA1035-OA7595	-16.07	-10.71	-5.02	-3.94	-2.74	-1.46
SO XBADJ	OA1035-OA7595	-0.14	1.19	2.48	3.70	4.80	5.76
SO XBADJ	OA1035-OA7595	4.69	3.48	2.17	0.78	-0.62	-2.01
SO XBADJ	OA1035-OA7595	-3.34	-4.56	-5.65	-11.33	-16.66	-21.49
SO XBADJ	OA1035-OA7595	-25.67	-29.06	-31.57	-100.73	-87.54	-87.32
SO YBADJ	OA1035-OA7595	-14.51	-6.96	-10.01	-12.76	-15.13	-17.03
SO YBADJ	OA1035-OA7595	-18.41	-19.24	-19.48	-19.13	-18.20	-16.71
SO YBADJ	OA1035-OA7595	-14.72	-12.28	-9.46	-6.36	-3.07	0.32
SO YBADJ	OA1035-OA7595	3.69	6.96	10.01	12.76	15.13	17.03
SO YBADJ	OA1035-OA7595	18.41	19.24	19.48	19.13	18.20	16.71
SO YBADJ	OA1035-OA7595	14.72	12.28	9.46	-14.45	14.53	0.01

SO BUILDHGT	OB1035-OB7595	29.57	29.57	29.57	23.47	23.47	23.47
SO BUILDHGT	OB1035-OB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OB1035-OB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OB1035-OB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OB1035-OB7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OB1035-OB7595	23.47	23.47	23.47	23.17	29.57	29.57
SO BUILDWID	OB1035-OB7595	18.85	19.29	19.15	25.81	27.87	29.09
SO BUILDWID	OB1035-OB7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	OB1035-OB7595	27.87	25.81	22.95	19.41	15.27	10.67
SO BUILDWID	OB1035-OB7595	15.27	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	OB1035-OB7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	OB1035-OB7595	27.87	25.81	22.95	27.91	18.85	17.83
SO BUILDLEN	OB1035-OB7595	10.39	13.06	15.33	27.87	25.81	22.95
SO BUILDLEN	OB1035-OB7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	OB1035-OB7595	25.81	27.87	29.09	29.43	28.87	27.43
SO BUILDLEN	OB1035-OB7595	28.87	29.43	29.09	27.87	25.81	22.95
SO BUILDLEN	OB1035-OB7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	OB1035-OB7595	25.81	27.87	29.09	47.73	10.39	7.41
SO XBADJ	OB1035-OB7595	-87.51	-100.83	-103.09	-58.25	-60.46	-60.84
SO XBADJ	OB1035-OB7595	-59.36	-56.09	-51.10	-4.13	-2.91	-1.59
SO XBADJ	OB1035-OB7595	-0.23	1.14	2.48	3.74	4.89	5.88
SO XBADJ	OB1035-OB7595	4.85	3.67	2.38	30.38	34.66	37.88
SO XBADJ	OB1035-OB7595	39.96	40.82	40.44	-11.14	-16.50	-21.36
SO XBADJ	OB1035-OB7595	-25.58	-29.01	-31.57	-109.53	-87.41	-87.24
SO YBADJ	OB1035-OB7595	-14.22	14.74	-1.86	22.56	14.53	6.05
SO YBADJ	OB1035-OB7595	-2.62	-11.20	-19.44	-19.29	-18.38	-16.92
SO YBADJ	OB1035-OB7595	-14.95	-12.52	-9.71	-6.61	-3.31	0.10
SO YBADJ	OB1035-OB7595	3.50	6.80	9.89	-22.56	-14.53	-6.05
SO YBADJ	OB1035-OB7595	2.62	11.20	19.44	19.29	18.38	16.92
SO YBADJ	OB1035-OB7595	14.95	12.52	9.71	-23.01	14.79	0.29

SO BUILDHGT	OC1035-OC7595	29.57	23.17	23.17	23.47	23.47	23.47
SO BUILDHGT	OC1035-OC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OC1035-OC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OC1035-OC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OC1035-OC7595	23.47	23.47	23.47	23.47	23.47	23.47
SO BUILDHGT	OC1035-OC7595	23.47	23.47	23.47	23.47	29.57	29.57
SO BUILDWID	OC1035-OC7595	18.85	27.91	34.24	25.81	27.87	29.09
SO BUILDWID	OC1035-OC7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	OC1035-OC7595	27.87	25.81	22.95	19.41	15.27	10.67
SO BUILDWID	OC1035-OC7595	15.27	19.41	22.95	25.81	27.87	29.09
SO BUILDWID	OC1035-OC7595	29.43	28.87	27.43	28.87	29.43	29.09
SO BUILDWID	OC1035-OC7595	27.87	25.81	22.95	19.41	18.85	17.83
SO BUILDLEN	OC1035-OC7595	10.39	47.73	46.38	27.87	25.81	22.95
SO BUILDLEN	OC1035-OC7595	19.41	15.27	10.67	15.27	19.41	22.95
SO BUILDLEN	OC1035-OC7595	25.81	27.87	29.09	29.43	28.87	27.43

```
SO BUILDLEN OC1035-OC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN OC1035-OC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN OC1035-OC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    OC1035-OC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    OC1035-OC7595   -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    OC1035-OC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    OC1035-OC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    OC1035-OC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    OC1035-OC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    OC1035-OC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    OC1035-OC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    OC1035-OC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    OC1035-OC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    OC1035-OC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    OC1035-OC7595     14.78  12.36   9.56   6.48  14.59   0.08

  SRCGROUP O1095 OA1095 OB1095 OC1095
  SRCGROUP O1059 OA1059 OB1059 OC1059
  SRCGROUP O1035 OA1035 OB1035 OC1035
  SRCGROUP O7595 OA7595 OB7595 OC7595
  SRCGROUP O7559 OA7559 OB7559 OC7559
  SRCGROUP O7535 OA7535 OB7535 OC7535

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
**
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
**   SURFFILE C:\amodmet\PBIMIA01.SFC
**   PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

PREDICTED SO_2 IMPACTS FOR RBEC

1. SUMMARY FILES FOR:
   - CTS/HRSGS AND FUEL HEATER
   - CTS/HRSGS, FUEL HEATER, AND GAS COMPRESSOR STATION
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :SO2GASC7.O01
AERMOD OUTPUT FILE NUMBER 2 :SO2GASC7.O02
AERMOD OUTPUT FILE NUMBER 3 :SO2GASC7.O03
AERMOD OUTPUT FILE NUMBER 4 :SO2GASC7.O04
AERMOD OUTPUT FILE NUMBER 5 :SO2GASC7.O05
First title for last output file is: 2001 RBEC- SO2 GAS 501G 95F&100%LD/ SH 35F&75%LD FH&CS 12/3
Second title for last output file is: SO2 EMISSION RATES PER CTS NOTE: ALL IDS THE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: MG					
Annual					
	2001	0.32084	593500.	2960900.	01123124
	2002	0.38772	593600.	2961100.	02123124
	2003	0.35687	593700.	2961200.	03123124
	2004	0.34209	593500.	2960900.	04123124
	2005	0.32060	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	2.17387	593300.	2960500.	01100924
	2002	1.72010	593500.	2961200.	02062024
	2003	2.09102	593600.	2961200.	03061624
	2004	1.87674	593700.	2961300.	04082624
	2005	2.01333	593700.	2961300.	05070424
HSH 24-Hour					
	2001	1.67814	593500.	2960500.	01050424
	2002	1.65320	593500.	2961100.	02062924
	2003	1.79534	593700.	2961400.	03071124
	2004	1.72087	593700.	2961300.	04060224
	2005	1.76962	593600.	2961100.	05040524
HIGH 3-Hour					
	2001	5.06564	593600.	2961100.	01072412
	2002	4.93280	593600.	2961200.	02072512
	2003	4.97452	593600.	2960700.	03022412
	2004	6.33135	594900.	2961000.	04092524
	2005	7.18288	593400.	2961300.	05102406
HSH 3-Hour					
	2001	4.55360	593500.	2961200.	01072415
	2002	4.69327	593700.	2961100.	02091412
	2003	4.65579	593800.	2961300.	03071112
	2004	5.22224	594600.	2961400.	04090506
	2005	5.25275	593500.	2961500.	05082524
SOURCE GROUP ID: SH					
Annual					
	2001	0.26640	593500.	2960800.	01123124
	2002	0.31809	593600.	2961100.	02123124
	2003	0.29220	593700.	2961200.	03123124
	2004	0.27992	593500.	2960900.	04123124
	2005	0.26297	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	1.89946	593300.	2960500.	01100924
	2002	1.41219	593700.	2961500.	02030224
	2003	1.69421	593600.	2961200.	03061624
	2004	1.54835	594300.	2961500.	04090524
	2005	1.68055	593300.	2961000.	05070824
HSH 24-Hour					
	2001	1.47476	593000.	2960500.	01110124
	2002	1.34099	593500.	2961100.	02062024
	2003	1.45402	593700.	2961100.	03062924
	2004	1.43601	594500.	2961600.	04090524
	2005	1.47361	593500.	2961100.	05060924
HIGH 3-Hour					
	2001	4.12201	593600.	2961100.	01072412
	2002	3.95668	593600.	2961100.	02091412
	2003	4.05870	593600.	2960700.	03022412
	2004	4.85835	594900.	2961000.	04092524
	2005	5.32233	593400.	2961300.	05102406
HSH 3-Hour					
	2001	3.64600	594800.	2960600.	01032212
	2002	3.81754	593700.	2961100.	02091412
	2003	3.74494	593800.	2961300.	03071112

	2004	4.12111	594600.	2961400.	04090506
	2005	4.34454	593500.	2961500.	05102403
SOURCE GROUP ID:	MGC7				
Annual					
	2001	0.43457	593700.	2960800.	01123124
	2002	0.45946	593700.	2961000.	02123124
	2003	0.41324	593700.	2961100.	03123124
	2004	0.46089	593700.	2960800.	04123124
	2005	0.42106	593800.	2960800.	05123124
HIGH 24-Hour					
	2001	2.76270	593951.	2960723.	01120524
	2002	2.34295	593800.	2960700.	02030624
	2003	2.27858	593700.	2960800.	03111624
	2004	2.88243	593951.	2960762.	04123124
	2005	2.49143	593700.	2960700.	05011024
HSH 24-Hour					
	2001	2.69744	593951.	2960723.	01100924
	2002	2.29273	593800.	2960700.	02120824
	2003	2.16876	593800.	2960800.	03102624
	2004	2.41696	593951.	2960762.	04032624
	2005	2.30212	593951.	2960762.	05010224
HIGH 3-Hour					
	2001	5.28059	593600.	2961100.	01072412
	2002	5.22381	593500.	2960800.	02120912
	2003	5.41852	593600.	2960700.	03022412
	2004	6.40150	594900.	2961000.	04092524
	2005	7.28591	593400.	2961300.	05102406
HSH 3-Hour					
	2001	4.81481	593500.	2960600.	01120515
	2002	4.89017	593700.	2961100.	02091412
	2003	4.93855	593600.	2960600.	03101615
	2004	5.27668	594600.	2961400.	04090506
	2005	5.34501	593500.	2961500.	05082524
SOURCE GROUP ID:	SHC7				
Annual					
	2001	0.40253	593800.	2960800.	01123124
	2002	0.41234	593800.	2960800.	02123124
	2003	0.35285	593700.	2961100.	03123124
	2004	0.42376	593800.	2960800.	04123124
	2005	0.38586	593800.	2960800.	05123124
HIGH 24-Hour					
	2001	2.74777	593951.	2960723.	01120524
	2002	2.25481	593800.	2960700.	02030624
	2003	2.23150	593900.	2960800.	03102524
	2004	2.88636	593951.	2960762.	04123124
	2005	2.36128	593700.	2960700.	05011024
HSH 24-Hour					
	2001	2.71221	593951.	2960723.	01100924
	2002	2.19854	593800.	2960700.	02120824
	2003	2.05480	593800.	2960800.	03102624
	2004	2.41671	593951.	2960762.	04032624
	2005	2.29850	593951.	2960762.	05010224
HIGH 3-Hour					
	2001	4.41846	594123.	2960837.	01091424
	2002	4.36083	593500.	2960800.	02120912
	2003	4.50270	593600.	2960700.	03022412
	2004	4.92850	594900.	2961000.	04092524
	2005	5.42536	593400.	2961300.	05102406
HSH 3-Hour					
	2001	4.09716	593600.	2960600.	01120512
	2002	4.01443	593700.	2961100.	02091412
	2003	4.02717	593600.	2960600.	03101615
	2004	4.29296	593600.	2960800.	04051512
	2005	4.44208	593500.	2961500.	05082524

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- SO2 GAS 501G 95F&100%LD/ SH 35F&75%LD FH&CS  12/31/08
  TITLETWO SO2 EMISSION RATES PER CTS  NOTE: ALL IDS THE SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 3
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
*****************************************
** ISCST3 Source Pathway
*****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA1095 POINT 594125.983 2960797.999 1.000
  LOCATION MGB1095 POINT 594172.071 2960797.963 1.000
  LOCATION MGC1095 POINT 594274.233 2960797.946 1.000

  LOCATION SHA1095 POINT 594125.983 2960797.999 1.000
  LOCATION SHB1095 POINT 594172.071 2960797.963 1.000
  LOCATION SHC1095 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** Baseload, 95 F with duct firing
  SRCPARAM MGA1095 2.09   45.4  357.5  17.30 6.71
  SRCPARAM MGB1095 2.09   45.4  357.5  17.30 6.71
  SRCPARAM MGC1095 2.09   45.4  357.5  17.30 6.71

** 75% load, 35 F
  SRCPARAM SHA1095 1.51   45.4  357.6  15.00 6.71
  SRCPARAM SHB1095 1.51   45.4  357.6  15.00 6.71
  SRCPARAM SHC1095 1.51   45.4  357.6  15.00 6.71

  SRCPARAM FGH1  0.0068 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.0072 12.2 729.800 49.50000 0.305

** Building Downwash **
SO BUILDHGT MGA1095    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA1095    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA1095    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA1095    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA1095    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA1095    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA1095    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA1095    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA1095    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA1095    25.81  27.87  29.09  29.43  28.87  27.43
```

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SO BUILDLEN MGA1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA1095     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA1095    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA1095    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA1095     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA1095      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA1095     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA1095    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA1095    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA1095    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA1095    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA1095      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA1095     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA1095     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB1095     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB1095     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB1095     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB1095     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB1095     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB1095    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB1095    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB1095     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB1095      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB1095     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB1095    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB1095    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB1095     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB1095    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB1095      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB1095      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB1095     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC1095     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC1095     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC1095     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC1095     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC1095     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC1095    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC1095    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC1095     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC1095      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC1095     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC1095    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC1095    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    MGC1095     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
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SO YBADJ   MGC1095    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC1095      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC1095     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC1095     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA1095    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA1095    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA1095    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA1095    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA1095    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA1095    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA1095    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA1095    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA1095    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA1095    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA1095    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA1095    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA1095    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA1095   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA1095   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA1095    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA1095     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA1095    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA1095   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA1095   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA1095   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA1095   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA1095     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA1095    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA1095    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB1095    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB1095    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB1095    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB1095    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB1095    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB1095    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB1095    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB1095    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB1095    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB1095    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB1095    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB1095    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB1095    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB1095   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB1095   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB1095    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB1095     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB1095    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB1095   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB1095   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB1095    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB1095   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB1095     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB1095     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB1095    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC1095    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC1095    31.39  31.39  31.39  31.39  31.39  31.39
SO BUILDHGT SHC1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC1095    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC1095    23.47  23.47  23.47  23.47  29.57  29.57
```

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SO BUILDWID SHC1095     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC1095     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC1095     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC1095     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC1095    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC1095    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    SHC1095     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC1095      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC1095     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC1095    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC1095    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC1095     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC1095    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC1095      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC1095     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC1095     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1     0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1     0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1     0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1   -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1   -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1   -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1     0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1    19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1     6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1    17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1     5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1   -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1     0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1    -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1    22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1    23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1    29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE1    19.41  15.27  10.67  18.85  22.89  19.15
```

```
SO BUILDLEN CSE1    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE1    -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ   CSE1    -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ   CSE1   -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ   CSE1   -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ   CSE1   -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ   CSE1   -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ   CSE1     2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ   CSE1    14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ   CSE1    11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ   CSE1    -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ   CSE1    -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ   CSE1    -4.10 -15.99  -7.49  -5.11  -2.58   0.03


SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE2    -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ   CSE2    -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ   CSE2   -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ   CSE2   -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ   CSE2   -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ   CSE2   -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ   CSE2     1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ   CSE2     9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ   CSE2     7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ   CSE2    -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ   CSE2     2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ   CSE2    -0.27 -12.78  -4.99  -3.40  -1.71   0.03


SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3     6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE3   -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ   CSE3    -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ   CSE3   -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ   CSE3   -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ   CSE3   -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ   CSE3   -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ   CSE3     0.90   1.75   2.54   3.25   3.87 -16.57
SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
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```
SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
```

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SO BUILDHGT CSE6      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6     29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6     17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6     18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE6    -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ   CSE6     41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ   CSE6     -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ   CSE6     -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ   CSE6    -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ   CSE6    -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ   CSE6     -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ   CSE6    -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ   CSE6     -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ   CSE6      1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ   CSE6     20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ   CSE6     15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7      6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7     32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7     29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE7    -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ   CSE7     40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ   CSE7     -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ   CSE7     -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ   CSE7    -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ   CSE7    -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ   CSE7     -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ   CSE7    -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ   CSE7    -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ   CSE7      2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ   CSE7     25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ   CSE7     11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA1095 MGB1095 MGC1095 FGH1
  SRCGROUP SH SHA1095 SHB1095 SHC1095 FGH1
  SRCGROUP MGC7 MGA1095 MGB1095 MGC1095 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA1095 SHB1095 SHC1095 FGH1 CSE1-CSE7

SO FINISHED
**
**********************************************
** ISCST3 Receptor Pathway
**********************************************
**
**
RE STARTING
```

```
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********************************************
** AERMOD Meteorology Pathway
**********************************************
**
**
ME STARTING
** SURFFILE C:\amodmet\PBIMIA01.SFC
** PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********************************************
** AERMOD Output Pathway
**********************************************
**
**
OU STARTING
  RECTABLE ALLAVE FIRST SECOND
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :S2GSC7CD.O01
AERMOD OUTPUT FILE NUMBER 2 :S2GSC7CD.O02
AERMOD OUTPUT FILE NUMBER 3 :S2GSC7CD.O03
AERMOD OUTPUT FILE NUMBER 4 :S2GSC7CD.O04
AERMOD OUTPUT FILE NUMBER 5 :S2GSC7CD.O05
First title for last output file is: 2001 RBEC- SO2 GAS 501G 95F&100%LD/ SH 35F&75%LD FH&CS CONDO 12/31/08
Second title for last output file is: SO2 EMISSION RATES PER CTS NOTE: ALL IDS THE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: MG					
Annual					
	2001	0.58188	594330.	2960240.	01123124
	2002	0.66639	594330.	2960240.	02123124
	2003	0.67830	594330.	2960240.	03123124
	2004	0.63494	594330.	2960240.	04123124
	2005	0.93103	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	8.83429	594330.	2960240.	01110924
	2002	6.43250	594330.	2960240.	02112524
	2003	8.97647	594330.	2960240.	03090924
	2004	8.72536	594280.	2960240.	04101624
	2005	10.20840	594330.	2960240.	05102824
HSH 24-Hour					
	2001	7.63857	594330.	2960240.	01082624
	2002	5.69429	594330.	2960240.	02110224
	2003	7.64073	594330.	2960240.	03021324
	2004	7.08863	594305.	2960240.	04110824
	2005	9.08622	594280.	2960240.	05102724
HIGH 3-Hour					
	2001	39.81971	594330.	2960240.	01091706
	2002	29.75123	594330.	2960240.	02010821
	2003	44.06467	594280.	2960240.	03111321
	2004	41.25920	594280.	2960240.	04101621
	2005	42.60266	594280.	2960240.	05102721
HSH 3-Hour					
	2001	31.19142	594330.	2960240.	01082606
	2002	27.00038	594280.	2960240.	02112503
	2003	33.43473	594305.	2960240.	03111321
	2004	29.33507	594330.	2960240.	04030824
	2005	41.74999	594280.	2960240.	05122321
SOURCE GROUP ID: SH					
Annual					
	2001	0.49844	594330.	2960240.	01123124
	2002	0.56489	594330.	2960240.	02123124
	2003	0.57471	594330.	2960240.	03123124
	2004	0.53547	594330.	2960240.	04123124
	2005	0.79038	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	7.65657	594330.	2960240.	01110924
	2002	5.56582	594330.	2960240.	02112524
	2003	7.78306	594330.	2960240.	03090924
	2004	7.52767	594280.	2960240.	04101624
	2005	8.67044	594330.	2960240.	05102824
HSH 24-Hour					
	2001	6.62431	594330.	2960240.	01082624
	2002	4.85923	594330.	2960240.	02110224
	2003	6.57233	594330.	2960240.	03021324
	2004	6.05000	594330.	2960240.	04101624
	2005	7.88909	594330.	2960240.	05101124
HIGH 3-Hour					
	2001	34.91132	594330.	2960240.	01091706
	2002	25.88041	594280.	2960240.	02121706
	2003	38.51081	594280.	2960240.	03111321
	2004	35.78012	594280.	2960240.	04101621
	2005	37.07573	594280.	2960240.	05102721
HSH 3-Hour					
	2001	27.26476	594330.	2960240.	01082606
	2002	23.68089	594280.	2960240.	02112503

2003	29.03384	594305.	2960240.	03111321
2004	25.48790	594330.	2960240.	04030824
2005	36.24665	594280.	2960240.	05122321

SOURCE GROUP ID: MGC7

Annual

2001	0.58663	594330.	2960240.	01123124
2002	0.67177	594330.	2960240.	02123124
2003	0.68322	594330.	2960240.	03123124
2004	0.63949	594330.	2960240.	04123124
2005	0.93646	594330.	2960240.	05123124

HIGH 24-Hour

2001	8.87528	594330.	2960240.	01110924
2002	6.43299	594330.	2960240.	02112524
2003	8.98212	594330.	2960240.	03090924
2004	8.73852	594280.	2960240.	04101624
2005	10.22481	594330.	2960240.	05102824

HSH 24-Hour

2001	7.66310	594330.	2960240.	01082624
2002	5.71762	594330.	2960240.	02110224
2003	7.65031	594330.	2960240.	03021324
2004	7.10235	594305.	2960240.	04110824
2005	9.10868	594280.	2960240.	05102724

HIGH 3-Hour

2001	39.81971	594330.	2960240.	01091706
2002	29.75123	594330.	2960240.	02010821
2003	44.06467	594280.	2960240.	03111321
2004	41.25920	594280.	2960240.	04101621
2005	42.60266	594280.	2960240.	05102721

HSH 3-Hour

2001	31.19142	594330.	2960240.	01082606
2002	27.00038	594280.	2960240.	02112503
2003	33.43473	594305.	2960240.	03111321
2004	29.33507	594330.	2960240.	04030824
2005	41.74999	594280.	2960240.	05122321

SOURCE GROUP ID: SHC7

Annual

2001	0.50320	594330.	2960240.	01123124
2002	0.57028	594330.	2960240.	02123124
2003	0.57967	594330.	2960240.	03123124
2004	0.54003	594330.	2960240.	04123124
2005	0.79584	594330.	2960240.	05123124

HIGH 24-Hour

2001	7.69755	594330.	2960240.	01110924
2002	5.56631	594330.	2960240.	02112524
2003	7.78871	594330.	2960240.	03090924
2004	7.54083	594280.	2960240.	04101624
2005	8.68685	594330.	2960240.	05102824

HSH 24-Hour

2001	6.64883	594330.	2960240.	01082624
2002	4.88256	594330.	2960240.	02110224
2003	6.58191	594330.	2960240.	03021324
2004	6.06586	594330.	2960240.	04101624
2005	7.89967	594330.	2960240.	05101124

HIGH 3-Hour

2001	34.91132	594330.	2960240.	01091706
2002	25.88041	594280.	2960240.	02121706
2003	38.51081	594280.	2960240.	03111321
2004	35.78012	594280.	2960240.	04101621
2005	37.07573	594280.	2960240.	05102721

HSH 3-Hour

2001	27.26476	594330.	2960240.	01082606
2002	23.68089	594280.	2960240.	02112503
2003	29.03384	594305.	2960240.	03111321
2004	25.48790	594330.	2960240.	04030824
2005	36.24665	594280.	2960240.	05122321

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- SO2 GAS 501G 95F&100%LD/ SH 35F&75%LD FH&CS CONDO 12/31/08
  TITLETWO SO2 EMISSION RATES PER CTS  NOTE: ALL IDS THE SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24 3
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
**********
** ISCST3 Source Pathway
**********
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA1095 POINT 594125.983 2960797.999 1.000
  LOCATION MGB1095 POINT 594172.071 2960797.963 1.000
  LOCATION MGC1095 POINT 594274.233 2960797.946 1.000

  LOCATION SHA1095 POINT 594125.983 2960797.999 1.000
  LOCATION SHB1095 POINT 594172.071 2960797.963 1.000
  LOCATION SHC1095 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** Baseload, 95 F with duct firing
  SRCPARAM MGA1095 2.09   45.4  357.5  17.30 6.71
  SRCPARAM MGB1095 2.09   45.4  357.5  17.30 6.71
  SRCPARAM MGC1095 2.09   45.4  357.5  17.30 6.71

** 75% load, 35 F
  SRCPARAM SHA1095 1.51   45.4  357.6  15.00 6.71
  SRCPARAM SHB1095 1.51   45.4  357.6  15.00 6.71
  SRCPARAM SHC1095 1.51   45.4  357.6  15.00 6.71

  SRCPARAM FGH1  0.0068 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.0072 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.0072 12.2 729.800 49.50000 0.305

** Building Downwash **
SO BUILDHGT MGA1095     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA1095     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA1095     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA1095     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA1095     10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA1095     19.41  15.27  10.67  15.27  19.41  22.95
```

```
SO BUILDLEN MGA1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGA1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA1095     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA1095    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA1095    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA1095     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA1095      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA1095     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA1095    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA1095    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA1095    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA1095    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA1095      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA1095     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA1095     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB1095     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB1095     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB1095     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB1095     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB1095     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB1095     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB1095    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB1095    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB1095     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB1095      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB1095     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB1095    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB1095    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB1095     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB1095    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB1095      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB1095      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB1095     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC1095     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC1095     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC1095     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC1095     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC1095     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC1095     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC1095    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC1095    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC1095     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC1095      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC1095     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC1095    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC1095    -14.43  23.32   8.08 -12.64 -15.01 -16.93
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SO YBADJ   MGC1095    16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ   MGC1095   -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC1095     3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC1095    18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC1095    14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA1095   29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA1095   23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA1095   18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA1095   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA1095   27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA1095   15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA1095   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA1095   27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA1095   10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA1095   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA1095   25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA1095   28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA1095   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA1095   25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA1095   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA1095   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA1095    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA1095     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA1095    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA1095   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA1095   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA1095   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA1095   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA1095     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA1095    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA1095    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB1095   29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB1095   23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB1095   18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB1095   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB1095   27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB1095   15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB1095   29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB1095   27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB1095   10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB1095   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB1095   25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB1095   28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB1095   19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB1095   25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB1095   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB1095   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB1095    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB1095     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB1095    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB1095   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB1095   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB1095    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB1095   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB1095     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB1095     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB1095    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC1095   29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC1095   31.39  31.39  31.39  31.39  31.39  31.39
SO BUILDHGT SHC1095   23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC1095   23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT SHC1095     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID SHC1095     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC1095     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC1095     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC1095     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC1095     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC1095     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC1095     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC1095     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC1095     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC1095     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC1095    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC1095    -112.31 -111.55 -107.40 -4.08  -2.88  -1.60
SO XBADJ    SHC1095     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC1095      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC1095     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC1095    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC1095    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC1095     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC1095    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC1095      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC1095     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC1095     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1      0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1      0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1      0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1    -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1    -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1    -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1      0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1     19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1      6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1     17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1      5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1    -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1      0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1     -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1     22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1     23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1     29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1     36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1     29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1     17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1     20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  22.95
```

SO BUILDLEN CSE1 19.41 15.27 10.67 18.85 22.89 19.15
SO BUILDLEN CSE1 18.42 17.14 34.93 36.07 36.11 35.05
SO XBADJ CSE1 -3.26 -3.92 -4.47 -4.87 44.56 -5.23
SO XBADJ CSE1 -5.18 -4.96 -4.60 -10.18 -15.46 -20.26
SO XBADJ CSE1 -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ CSE1 -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ CSE1 -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ CSE1 -78.05 -75.65 -4.44 -3.90 -3.25 -2.50
SO YBADJ CSE1 2.64 5.17 7.54 9.68 -18.17 13.03
SO YBADJ CSE1 14.13 14.80 15.03 14.79 14.11 13.00
SO YBADJ CSE1 11.49 9.64 7.49 5.11 2.58 -0.03
SO YBADJ CSE1 -2.64 -5.17 -7.54 -9.68 18.17 7.91
SO YBADJ CSE1 -2.58 -13.00 -23.02 19.00 8.83 7.92
SO YBADJ CSE1 -4.10 -15.99 -7.49 -5.11 -2.58 0.03

SO BUILDHGT CSE2 6.10 6.10 6.10 6.10 23.47 23.47
SO BUILDHGT CSE2 6.10 6.10 6.10 6.10 6.10 6.10
SO BUILDHGT CSE2 6.10 6.10 6.10 6.10 6.10 6.10
SO BUILDHGT CSE2 6.10 6.10 6.10 6.10 23.47 23.47
SO BUILDHGT CSE2 23.47 23.47 23.47 6.10 6.10 29.57
SO BUILDHGT CSE2 29.57 29.57 6.10 6.10 6.10 6.10
SO BUILDWID CSE2 15.09 20.58 25.44 29.54 27.87 29.09
SO BUILDWID CSE2 36.07 36.11 35.05 36.11 36.07 34.93
SO BUILDWID CSE2 32.73 29.54 25.44 20.58 15.09 9.14
SO BUILDWID CSE2 15.09 20.58 25.44 29.54 27.87 29.09
SO BUILDWID CSE2 29.43 28.87 27.43 36.11 36.07 15.33
SO BUILDWID CSE2 17.14 18.42 25.44 20.58 15.09 9.14
SO BUILDLEN CSE2 36.11 36.07 34.93 32.73 25.81 22.95
SO BUILDLEN CSE2 20.58 15.09 9.14 15.09 20.58 25.44
SO BUILDLEN CSE2 29.54 32.73 34.93 36.07 36.11 35.05
SO BUILDLEN CSE2 36.11 36.07 34.93 32.73 25.81 22.95
SO BUILDLEN CSE2 19.41 15.27 10.67 15.09 20.58 19.15
SO BUILDLEN CSE2 18.42 17.14 34.93 36.07 36.11 35.05
SO XBADJ CSE2 -8.18 -8.62 -8.80 -8.70 41.35 45.77
SO XBADJ CSE2 -6.89 -5.83 -4.60 -9.31 -13.75 -17.76
SO XBADJ CSE2 -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ CSE2 -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ CSE2 -68.21 -65.62 -61.03 -5.78 -6.84 -80.58
SO XBADJ CSE2 -81.27 -79.48 -8.77 -8.60 -8.18 -7.50
SO YBADJ CSE2 1.77 3.46 5.04 6.47 -22.00 -12.24
SO YBADJ CSE2 9.43 9.88 10.03 9.87 9.41 8.67
SO YBADJ CSE2 7.66 6.42 4.99 3.40 1.71 -0.03
SO YBADJ CSE2 -1.77 -3.46 -5.04 -6.47 22.00 12.24
SO YBADJ CSE2 2.12 -8.07 -18.02 -9.87 -9.41 12.25
SO YBADJ CSE2 -0.27 -12.78 -4.99 -3.40 -1.71 0.03

SO BUILDHGT CSE3 6.10 6.10 6.10 6.10 6.10 23.47
SO BUILDHGT CSE3 6.10 6.10 6.10 23.47 6.10 6.10
SO BUILDHGT CSE3 6.10 6.10 6.10 6.10 6.10 6.10
SO BUILDHGT CSE3 6.10 6.10 6.10 6.10 6.10 23.47
SO BUILDHGT CSE3 23.47 23.47 23.47 23.47 6.10 6.10
SO BUILDHGT CSE3 29.57 29.57 6.10 6.10 6.10 6.10
SO BUILDWID CSE3 15.09 20.58 25.44 29.54 32.73 29.09
SO BUILDWID CSE3 36.07 36.11 35.05 28.87 36.07 34.93
SO BUILDWID CSE3 32.73 29.54 25.44 20.58 15.09 9.14
SO BUILDWID CSE3 15.09 20.58 25.44 29.54 32.73 29.09
SO BUILDWID CSE3 29.43 28.87 27.43 28.87 36.07 34.93
SO BUILDWID CSE3 17.14 18.42 25.44 20.58 15.09 9.14
SO BUILDLEN CSE3 36.11 36.07 34.93 32.73 29.54 22.95
SO BUILDLEN CSE3 20.58 15.09 9.14 15.27 20.58 25.44
SO BUILDLEN CSE3 29.54 32.73 34.93 36.07 36.11 35.05
SO BUILDLEN CSE3 36.11 36.07 34.93 32.73 29.54 22.95
SO BUILDLEN CSE3 19.41 15.27 10.67 15.27 20.58 25.44
SO BUILDLEN CSE3 18.42 17.14 34.93 36.07 36.11 35.05
SO XBADJ CSE3 -13.11 -13.32 -13.13 -12.53 -11.56 43.27
SO XBADJ CSE3 -8.60 -6.70 -4.60 44.96 -12.04 -15.26
SO XBADJ CSE3 -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ CSE3 -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ CSE3 -66.50 -64.75 -61.03 -60.23 -8.55 -10.19
SO XBADJ CSE3 -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ CSE3 0.90 1.75 2.54 3.25 3.87 -16.57

```
SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
```

```
SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6    29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6    17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6    18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ    CSE6   -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ    CSE6    41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ    CSE6    -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ    CSE6    -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ    CSE6   -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ    CSE6   -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ    CSE6    -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ    CSE6   -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ    CSE6    -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ    CSE6     1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ    CSE6    20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ    CSE6    15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7     6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7    32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7    29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ    CSE7   -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ    CSE7    40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ    CSE7    -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ    CSE7    -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ    CSE7   -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ    CSE7   -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ    CSE7    -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ    CSE7   -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ    CSE7   -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ    CSE7     2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ    CSE7    25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ    CSE7    11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA1095 MGB1095 MGC1095 FGH1
  SRCGROUP SH SHA1095 SHB1095 SHC1095 FGH1
  SRCGROUP MGC7 MGA1095 MGB1095 MGC1095 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA1095 SHB1095 SHC1095 FGH1 CSE1-CSE7

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
**
```

```
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
** SURFFILE C:\amodmet\PBIMIA01.SFC
** PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST SECOND
OU FINISHED
**
```

PREDICTED PM_{10} IMPACTS FOR RBEC

1. SUMMARY FILES FOR:
   - CTS/HRSGS AND FUEL HEATER
   - CTS/HRSGS, FUEL HEATER, AND GAS COMPRESSOR STATION
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :PMOILC7.001
AERMOD OUTPUT FILE NUMBER 2 :PMOILC7.002
AERMOD OUTPUT FILE NUMBER 3 :PMOILC7.003
AERMOD OUTPUT FILE NUMBER 4 :PMOILC7.004
AERMOD OUTPUT FILE NUMBER 5 :PMOILC7.005
First title for last output file is: 2001 FPL RBEC- PM OIL MPS 35F&75%LD/SH 95F&75%LD FH&CS 12/31/
Second title for last output file is: PM EMISSION RATES PER CTS NOTE: IDS ALL THE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID:	MG				
Annual					
	2001	0.31434	593400.	2960800.	01123124
	2002	0.39668	593600.	2961100.	02123124
	2003	0.37379	593600.	2961300.	03123124
	2004	0.35871	593500.	2961000.	04123124
	2005	0.33147	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	2.13741	593200.	2960500.	01100924
	2002	1.97762	593700.	2961600.	02030224
	2003	2.17546	593600.	2961200.	03061624
	2004	2.54192	594700.	2961600.	04090524
	2005	2.32300	593300.	2961200.	05061024
HSH 24-Hour					
	2001	1.93320	593400.	2960500.	01100924
	2002	1.93466	593400.	2961200.	02041224
	2003	1.99708	593500.	2961200.	03062924
	2004	1.94261	593300.	2961200.	04091424
	2005	1.94938	593300.	2961200.	05060924
SOURCE GROUP ID:	SH				
Annual					
	2001	0.35044	593500.	2960800.	01123124
	2002	0.43468	593600.	2961100.	02123124
	2003	0.40299	593600.	2961300.	03123124
	2004	0.39086	593500.	2960900.	04123124
	2005	0.36305	593500.	2960900.	05123124
HIGH 24-Hour					
	2001	2.46400	593300.	2960500.	01100924
	2002	2.12770	593700.	2961600.	02030224
	2003	2.38673	593600.	2961200.	03061624
	2004	2.59503	594600.	2961500.	04090524
	2005	2.49327	593300.	2961200.	05061024
HSH 24-Hour					
	2001	2.13516	593400.	2960500.	01050424
	2002	2.02890	593500.	2961200.	02041224
	2003	2.14538	593500.	2961200.	03062924
	2004	2.06210	594500.	2961600.	04092624
	2005	2.08639	593300.	2961200.	05060924
SOURCE GROUP ID:	MGC7				
Annual					
	2001	0.57576	593800.	2960700.	01123124
	2002	0.60226	593800.	2960800.	02123124
	2003	0.50729	593800.	2960800.	03123124
	2004	0.62869	593800.	2960800.	04123124
	2005	0.56622	593800.	2960800.	05123124
HIGH 24-Hour					
	2001	4.40584	593951.	2960723.	01100924
	2002	3.49289	593800.	2960700.	02030624
	2003	3.60368	593900.	2960800.	03102524
	2004	4.71303	593951.	2960762.	04123124
	2005	3.72217	593951.	2960762.	05100224
HSH 24-Hour					
	2001	4.40223	593951.	2960723.	01120524
	2002	3.33818	593800.	2960700.	02120824
	2003	3.24169	593951.	2960762.	03111724
	2004	3.90938	593951.	2960762.	04032624
	2005	3.67748	593951.	2960762.	05010224
SOURCE GROUP ID:	SHC7				
Annual					
	2001	0.60447	593800.	2960800.	01123124

	2002	0.62825	593800.	2960800.	02123124
	2003	0.52685	593800.	2960800.	03123124
	2004	0.65278	593800.	2960800.	04123124
	2005	0.58959	593800.	2960800.	05123124
HIGH 24-Hour					
	2001	4.46284	593951.	2960723.	01100924
	2002	3.59183	593800.	2960700.	02030624
	2003	3.63853	593900.	2960800.	03102524
	2004	4.72636	593951.	2960762.	04123124
	2005	3.73368	593951.	2960762.	05100224
HSH 24-Hour					
	2001	4.41466	593951.	2960723.	01120524
	2002	3.46239	593800.	2960700.	02120824
	2003	3.24963	593951.	2960762.	03111724
	2004	3.92764	593951.	2960762.	04032624
	2005	3.68742	593951.	2960762.	05010224

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 FPL RBEC- PM OIL MPS 35F&75%LD/SH 95F&75%LD FH&CS 12/31/08
  TITLETWO PM EMISSION RATES PER CTS  NOTE: IDS ALL THE SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA7595 POINT 594125.983 2960797.999 1.000
  LOCATION MGB7595 POINT 594172.071 2960797.963 1.000
  LOCATION MGC7595 POINT 594274.233 2960797.946 1.000

  LOCATION SHA7595 POINT 594125.983 2960797.999 1.000
  LOCATION SHB7595 POINT 594172.071 2960797.963 1.000
  LOCATION SHC7595 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** 75% load, 35 F
  SRCPARAM MGA7595 4.75   45.4  449.8  23.10  6.71
  SRCPARAM MGB7595 4.75   45.4  449.8  23.10  6.71
  SRCPARAM MGC7595 4.75   45.4  449.8  23.10  6.71
** 75% load, 95 F
  SRCPARAM SHA7595 3.78   45.4  447.0  16.63  6.71
  SRCPARAM SHB7595 3.78   45.4  447.0  16.63  6.71
  SRCPARAM SHC7595 3.78   45.4  447.0  16.63  6.71

  SRCPARAM FGH1  0.0025 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.0127 12.2 729.800 49.50000 0.305


** Building Downwash **
SO BUILDHGT MGA7595     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA7595     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA7595     10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7595     25.81  27.87  29.09  29.43  28.87  27.43
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SO BUILDLEN MGA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA7595   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA7595   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA7595    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA7595     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA7595    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA7595   -25.67 -29.06 -31.57-100.73 -87.54 -87.32
SO YBADJ    MGA7595   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA7595   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA7595   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA7595     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA7595    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA7595    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB7595   -87.51-100.83-103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB7595   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB7595    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB7595     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB7595    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB7595   -25.58 -29.01 -31.57-109.53 -87.41 -87.24
SO YBADJ    MGB7595   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB7595    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB7595   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB7595     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB7595     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB7595    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595    23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC7595    18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595    27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC7595    10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595    25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC7595   -87.49-109.62-111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC7595   -112.31-111.55-107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC7595    -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC7595     4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC7595    -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC7595   -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC7595   -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    MGC7595    16.51  -1.56 -19.58 -19.12 -18.21 -16.75
```

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SO YBADJ   MGC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA7595    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA7595    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA7595     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA7595      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA7595     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA7595    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA7595    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA7595    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA7595    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA7595      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA7595     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA7595     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB7595    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB7595    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB7595     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB7595      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB7595     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB7595    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB7595    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB7595     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB7595    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB7595      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB7595      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB7595     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    31.39  31.39  31.39  31.39  31.39  31.39
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  29.57  29.57
```

```
SO BUILDWID SHC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC7595    -112.31 -111.55 -107.40 -4.08 -2.88 -1.60
SO XBADJ    SHC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1     0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1     0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1     0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1   -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1   -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1   -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1     0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1    19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1     6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1    17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1     5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1   -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1     0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1    -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1    22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1    23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1    29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE1    19.41  15.27  10.67  18.85  22.89  19.15
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SO BUILDLEN CSE1     18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE1     -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ   CSE1     -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ   CSE1    -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ   CSE1    -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ   CSE1    -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ   CSE1    -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ   CSE1      2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ   CSE1     14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ   CSE1     11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ   CSE1     -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ   CSE1     -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ   CSE1     -4.10 -15.99  -7.49  -5.11  -2.58   0.03


SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE2    -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ   CSE2    -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ   CSE2   -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ   CSE2   -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ   CSE2   -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ   CSE2   -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ   CSE2     1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ   CSE2     9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ   CSE2     7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ   CSE2    -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ   CSE2     2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ   CSE2    -0.27 -12.78  -4.99  -3.40  -1.71   0.03


SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3     6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE3   -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ   CSE3    -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ   CSE3   -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ   CSE3   -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ   CSE3   -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ   CSE3   -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ   CSE3     0.90   1.75   2.54   3.25   3.87 -16.57
SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
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SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
```

```
SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6    29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6    17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6    18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE6   -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ   CSE6    41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ   CSE6    -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ   CSE6    -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ   CSE6   -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ   CSE6   -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ   CSE6    -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ   CSE6   -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ   CSE6    -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ   CSE6     1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ   CSE6    20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ   CSE6    15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7     6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7    32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7    29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE7   -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ   CSE7    40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ   CSE7    -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ   CSE7    -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ   CSE7   -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ   CSE7   -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ   CSE7    -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ   CSE7   -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ   CSE7   -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ   CSE7     2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ   CSE7    25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ   CSE7    11.49   3.29 -12.40   5.15   2.63   0.03


  SRCGROUP MG MGA7595 MGB7595 MGC7595 FGH1
  SRCGROUP SH SHA7595 SHB7595 SHC7595 FGH1
  SRCGROUP MGC7 MGA7595 MGB7595 MGC7595 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA7595 SHB7595 SHC7595 FGH1 CSE1-CSE7

SO FINISHED
**
**********************************
** ISCST3 Receptor Pathway
**********************************
**
**
```

```
RE STARTING
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
** SURFFILE C:\amodmet\PBIMIA01.SFC
** PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST SECOND
OU FINISHED
**
```

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :PMOLC7CD.001
AERMOD OUTPUT FILE NUMBER 2 :PMOLC7CD.002
AERMOD OUTPUT FILE NUMBER 3 :PMOLC7CD.003
AERMOD OUTPUT FILE NUMBER 4 :PMOLC7CD.004
AERMOD OUTPUT FILE NUMBER 5 :PMOLC7CD.005
First title for last output file is: 2001 FPL RBEC- PM OIL MPS 35F&75%LD/SH 95F&75%LD FH&CS CONDO
Second title for last output file is: PM EMISSION RATES PER CTS NOTE: IDS ALL THE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID:	MG				
Annual					
	2001	0.42485	594330.	2960240.	01123124
	2002	0.52834	594330.	2960240.	02123124
	2003	0.54669	594330.	2960240.	03123124
	2004	0.53136	594330.	2960240.	04123124
	2005	0.72956	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	5.53756	594330.	2960240.	01110924
	2002	5.53427	594280.	2960240.	02052124
	2003	6.43368	594330.	2960240.	03112924
	2004	7.87892	594330.	2960240.	04090424
	2005	7.42273	594330.	2960240.	05102824
HSH 24-Hour					
	2001	5.09816	594330.	2960240.	01041824
	2002	4.43487	594330.	2960240.	02111324
	2003	5.61512	594330.	2960240.	03021324
	2004	5.75832	594330.	2960240.	04110824
	2005	6.88978	594280.	2960240.	05122324
SOURCE GROUP ID:	SH				
Annual					
	2001	0.51990	594330.	2960240.	01123124
	2002	0.62877	594330.	2960240.	02123124
	2003	0.64687	594330.	2960240.	03123124
	2004	0.62205	594330.	2960240.	04123124
	2005	0.87229	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	7.11033	594330.	2960240.	01110924
	2002	5.91894	594280.	2960240.	02052124
	2003	6.90118	594330.	2960240.	03021324
	2004	7.59152	594330.	2960240.	04090424
	2005	9.02212	594330.	2960240.	05102824
HSH 24-Hour					
	2001	5.54520	594330.	2960240.	01041824
	2002	5.11512	594330.	2960240.	02112524
	2003	6.84932	594330.	2960240.	03112924
	2004	6.97186	594330.	2960240.	04110824
	2005	8.21822	594280.	2960240.	05041524
SOURCE GROUP ID:	MGC7				
Annual					
	2001	0.43329	594330.	2960240.	01123124
	2002	0.53790	594330.	2960240.	02123124
	2003	0.55549	594330.	2960240.	03123124
	2004	0.53947	594330.	2960240.	04123124
	2005	0.73928	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	5.60986	594330.	2960240.	01110924
	2002	5.59406	594280.	2960240.	02052124
	2003	6.45699	594330.	2960240.	03112924
	2004	7.88786	594330.	2960240.	04090424
	2005	7.45167	594330.	2960240.	05102824
HSH 24-Hour					
	2001	5.12173	594305.	2960240.	01041824
	2002	4.49975	594330.	2960240.	02111324
	2003	5.63200	594330.	2960240.	03021324
	2004	5.78207	594330.	2960240.	04110824
	2005	6.92983	594280.	2960240.	05122324
SOURCE GROUP ID:	SHC7				
Annual					
	2001	0.52835	594330.	2960240.	01123124

	2002	0.63833	594330.	2960240.	02123124
	2003	0.65566	594330.	2960240.	03123124
	2004	0.63015	594330.	2960240.	04123124
	2005	0.88198	594330.	2960240.	05123124
HIGH 24-Hour					
	2001	7.18263	594330.	2960240.	01110924
	2002	5.97873	594280.	2960240.	02052124
	2003	6.91806	594330.	2960240.	03021324
	2004	7.60046	594330.	2960240.	04090424
	2005	9.05106	594330.	2960240.	05102824
HSH 24-Hour					
	2001	5.56488	594330.	2960240.	01041824
	2002	5.11599	594330.	2960240.	02112524
	2003	6.87262	594330.	2960240.	03112924
	2004	6.99562	594330.	2960240.	04110824
	2005	8.25062	594280.	2960240.	05041524

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 FPL RBEC- PM OIL MPS 35F&75%LD/SH 95F&75%LD FH&CS CONDO 12/31/08
  TITLETWO PM EMISSION RATES PER CTS  NOTE: IDS ALL THE SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD 24
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
**********************************
** ISCST3 Source Pathway
**********************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA7595 POINT 594125.983 2960797.999 1.000
  LOCATION MGB7595 POINT 594172.071 2960797.963 1.000
  LOCATION MGC7595 POINT 594274.233 2960797.946 1.000

  LOCATION SHA7595 POINT 594125.983 2960797.999 1.000
  LOCATION SHB7595 POINT 594172.071 2960797.963 1.000
  LOCATION SHC7595 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** 75% load, 35 F
  SRCPARAM MGA7595 4.75   45.4  449.8  23.10  6.71
  SRCPARAM MGB7595 4.75   45.4  449.8  23.10  6.71
  SRCPARAM MGC7595 4.75   45.4  449.8  23.10  6.71
** 75% load, 95 F
  SRCPARAM SHA7595 3.78   45.4  447.0  16.63  6.71
  SRCPARAM SHB7595 3.78   45.4  447.0  16.63  6.71
  SRCPARAM SHC7595 3.78   45.4  447.0  16.63  6.71

  SRCPARAM FGH1  0.0025 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.0127 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.0127 12.2 729.800 49.50000 0.305


** Building Downwash **
SO BUILDHGT MGA7595     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA7595     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA7595     10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
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```
SO BUILDLEN MGA7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGA7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7595     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA7595    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA7595    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA7595     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA7595      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA7595     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA7595    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA7595    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA7595    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA7595    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA7595      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA7595     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA7595     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB7595     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB7595     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB7595     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB7595    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB7595    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB7595     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB7595      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB7595     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB7595    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB7595    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB7595     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB7595    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB7595      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB7595      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB7595     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC7595     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC7595    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
```

```
SO YBADJ   MGC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ   MGC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA7595    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA7595    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA7595     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA7595      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA7595     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA7595    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA7595    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA7595    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA7595    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA7595      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA7595     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA7595     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB7595    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB7595    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB7595     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB7595      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB7595     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB7595    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB7595    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB7595     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB7595    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB7595      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB7595      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB7595     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    31.39  31.39  31.39  31.39  31.39  31.39
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT SHC7595     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID SHC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC7595    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    SHC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1      0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1      0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1      0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1    -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1    -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1    -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1      0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1     19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1      6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1     17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1      5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1    -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1      0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1     -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1     22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1     23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1     29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1     36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1     29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1     17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1     20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  22.95
```

```
SO BUILDLEN CSE1     19.41  15.27  10.67  18.85  22.89  19.15
SO BUILDLEN CSE1     18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ    CSE1    -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ    CSE1    -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ    CSE1   -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ    CSE1   -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ    CSE1   -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ    CSE1   -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ    CSE1     2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ    CSE1    14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ    CSE1    11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ    CSE1    -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ    CSE1    -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ    CSE1    -4.10 -15.99  -7.49  -5.11  -2.58   0.03


SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ    CSE2    -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ    CSE2    -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ    CSE2   -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ    CSE2   -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ    CSE2   -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ    CSE2   -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ    CSE2     1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ    CSE2     9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ    CSE2     7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ    CSE2    -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ    CSE2     2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ    CSE2    -0.27 -12.78  -4.99  -3.40  -1.71   0.03


SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3     6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ    CSE3   -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ    CSE3    -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ    CSE3   -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ    CSE3   -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ    CSE3   -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ    CSE3   -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ    CSE3     0.90   1.75   2.54   3.25   3.87 -16.57
```

```
SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
```

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SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6    29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6    17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6    18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE6   -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ   CSE6    41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ   CSE6    -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ   CSE6    -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ   CSE6   -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ   CSE6   -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ   CSE6    -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ   CSE6   -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ   CSE6    -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ   CSE6     1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ   CSE6    20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ   CSE6    15.05   0.08 -14.90   3.44   1.76   0.03

SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7     6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7    32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7    29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE7   -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ   CSE7    40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ   CSE7    -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ   CSE7    -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ   CSE7   -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ   CSE7   -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ   CSE7    -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ   CSE7   -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ   CSE7   -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ   CSE7     2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ   CSE7    25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ   CSE7    11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA7595 MGB7595 MGC7595 FGH1
  SRCGROUP SH SHA7595 SHB7595 SHC7595 FGH1
  SRCGROUP MGC7 MGA7595 MGB7595 MGC7595 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA7595 SHB7595 SHC7595 FGH1 CSE1-CSE7

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
```

```
**
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********************************************
** AERMOD Meteorology Pathway
**********************************************
**
**
ME STARTING
** SURFFILE C:\amodmet\PBIMIA01.SFC
** PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********************************************
** AERMOD Output Pathway
**********************************************
**
**
OU STARTING
  RECTABLE ALLAVE FIRST SECOND
OU FINISHED
**
```

PREDICTED NO_2 IMPACTS FOR RBEC

1. SUMMARY FILES FOR:
   - CTS/HRSGS AND FUEL HEATER
   - CTS/HRSGS, FUEL HEATER, AND GAS COMPRESSOR STATION
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :NO2OILC7.O01
AERMOD OUTPUT FILE NUMBER 2 :NO2OILC7.O02
AERMOD OUTPUT FILE NUMBER 3 :NO2OILC7.O03
AERMOD OUTPUT FILE NUMBER 4 :NO2OILC7.O04
AERMOD OUTPUT FILE NUMBER 5 :NO2OILC7.O05
First title for last output file is: 2001 RBEC- NO2 OIL 501G 59F&100%/SH 59F&75% LOAD FH&CS 12/31/08
Second title for last output file is: NO2 EMISSION RATES PER CTS NOTE: ALL IDS ARE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: MG					
Annual					
	2001	1.95072	594037.	2960840.	01123124
	2002	2.19606	594037.	2960840.	02123124
	2003	1.85576	594123.	2960837.	03123124
	2004	1.81328	594037.	2960840.	04123124
	2005	1.65497	594123.	2960837.	05123124
SOURCE GROUP ID: SH					
Annual					
	2001	1.95072	594037.	2960840.	01123124
	2002	2.19606	594037.	2960840.	02123124
	2003	1.85576	594123.	2960837.	03123124
	2004	1.81328	594037.	2960840.	04123124
	2005	1.65497	594123.	2960837.	05123124
SOURCE GROUP ID: MGC7					
Annual					
	2001	21.46101	593951.	2960762.	01123124
	2002	20.00818	593952.	2960802.	02123124
	2003	16.47338	593952.	2960802.	03123124
	2004	22.84689	593951.	2960762.	04123124
	2005	18.03088	593900.	2960800.	05123124
SOURCE GROUP ID: SHC7					
Annual					
	2001	21.46101	593951.	2960762.	01123124
	2002	20.00818	593952.	2960802.	02123124
	2003	16.47338	593952.	2960802.	03123124
	2004	22.84689	593951.	2960762.	04123124
	2005	18.03088	593900.	2960800.	05123124

All receptor computations reported with respect to a user-specified origin
GRID 0.00 0.00
DISCRETE 0.00 0.00

```
CO STARTING
  TITLEONE 2001 RBEC- NO2 OIL 501G 59F&100%/SH 59F&75% LOAD FH&CS  12/31/08
  TITLETWO NO2 EMISSION RATES PER CTS  NOTE: ALL IDS ARE SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
****************************************
** ISCST3 Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA7559 POINT 594125.983 2960797.999 1.000
  LOCATION MGB7559 POINT 594172.071 2960797.963 1.000
  LOCATION MGC7559 POINT 594274.233 2960797.946 1.000

  LOCATION SHA7559 POINT 594125.983 2960797.999 1.000
  LOCATION SHB7559 POINT 594172.071 2960797.963 1.000
  LOCATION SHC7559 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** 100% load, 59 F
  SRCPARAM MGA7559 9.14   45.4  453.7  23.03  6.71
  SRCPARAM MGB7559 9.14   45.4  453.7  23.03  6.71
  SRCPARAM MGC7559 9.14   45.4  453.7  23.03  6.71

** 75% load, 59 F
  SRCPARAM SHA7559 8.16   45.4  448.7  18.04  6.71
  SRCPARAM SHB7559 8.16   45.4  448.7  18.04  6.71
  SRCPARAM SHC7559 8.16   45.4  448.7  18.04  6.71

  SRCPARAM FGH1  0.12 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.558 12.2 729.800 49.50000 0.305


** Building Downwash **
SO BUILDHGT MGA7559     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA7559     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7559     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA7559     10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7559     19.41  15.27  10.67  15.27  19.41  22.95
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SO BUILDLEN MGA7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGA7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7559     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA7559    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA7559    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA7559     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA7559      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA7559     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA7559    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA7559    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA7559    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA7559    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA7559      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA7559     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA7559     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB7559     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB7559     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7559     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB7559     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7559     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB7559    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB7559    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB7559     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB7559      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB7559     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB7559    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB7559    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB7559     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB7559    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB7559      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB7559      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB7559     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC7559     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC7559     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7559     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC7559     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7559     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC7559    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC7559    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC7559     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC7559      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC7559     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC7559    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC7559    -14.43  23.32   8.08 -12.64 -15.01 -16.93
```

```
SO YBADJ   MGC7559     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ   MGC7559    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC7559      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC7559     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC7559     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA7559    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA7559    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7559    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA7559    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7559    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA7559    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7559    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA7559    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7559    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA7559    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA7559    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA7559     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA7559      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA7559     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA7559    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA7559    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA7559    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA7559    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA7559      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA7559     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA7559     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB7559    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB7559    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7559    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB7559    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7559    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB7559    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7559    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB7559    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7559    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB7559    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB7559    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB7559     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB7559      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB7559     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB7559    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB7559    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB7559     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB7559    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB7559      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB7559      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB7559     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC7559    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT SHC7559     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID SHC7559     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7559     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC7559     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7559     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC7559    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC7559    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    SHC7559     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC7559      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC7559     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC7559    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC7559    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC7559     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC7559    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC7559      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC7559     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC7559     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1     0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1     0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1     0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1   -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1   -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1   -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1     0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1    19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1     6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1    17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1     5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1   -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1     0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1    -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1    22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1    23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1    29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  22.95
```

```
SO BUILDLEN CSE1     19.41  15.27  10.67  18.85  22.89  19.15
SO BUILDLEN CSE1     18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE1    -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ   CSE1    -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ   CSE1   -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ   CSE1   -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ   CSE1   -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ   CSE1   -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ   CSE1     2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ   CSE1    14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ   CSE1    11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ   CSE1    -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ   CSE1    -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ   CSE1    -4.10 -15.99  -7.49  -5.11  -2.58   0.03


SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE2    -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ   CSE2    -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ   CSE2   -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ   CSE2   -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ   CSE2   -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ   CSE2   -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ   CSE2     1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ   CSE2     9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ   CSE2     7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ   CSE2    -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ   CSE2     2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ   CSE2    -0.27 -12.78  -4.99  -3.40  -1.71   0.03


SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3     6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE3   -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ   CSE3    -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ   CSE3   -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ   CSE3   -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ   CSE3   -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ   CSE3   -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ   CSE3     0.90   1.75   2.54   3.25   3.87 -16.57
```

```
SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
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SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6    29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6    17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6    18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ    CSE6   -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ    CSE6    41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ    CSE6    -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ    CSE6    -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ    CSE6   -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ    CSE6   -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ    CSE6    -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ    CSE6   -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ    CSE6    -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ    CSE6     1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ    CSE6    20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ    CSE6    15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7     6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7    15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7    32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7    36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7    29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ    CSE7   -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ    CSE7    40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ    CSE7    -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ    CSE7    -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ    CSE7   -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ    CSE7   -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ    CSE7    -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ    CSE7   -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ    CSE7   -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ    CSE7     2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ    CSE7    25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ    CSE7    11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA7595 MGB7595 MGC7595 FGH1
  SRCGROUP SH SHA7595 SHB7595 SHC7595 FGH1
  SRCGROUP MGC7 MGA7595 MGB7595 MGC7595 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA7595 SHB7595 SHC7595 FGH1 CSE1-CSE7

SO FINISHED
**
**********************************************
** ISCST3 Receptor Pathway
**********************************************
**
**
```

```
RE STARTING
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
** SURFFILE C:\amodmet\PBIMIA01.SFC
** PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :N2OLC7CD.O01
AERMOD OUTPUT FILE NUMBER 2 :N2OLC7CD.O02
AERMOD OUTPUT FILE NUMBER 3 :N2OLC7CD.O03
AERMOD OUTPUT FILE NUMBER 4 :N2OLC7CD.O04
AERMOD OUTPUT FILE NUMBER 5 :N2OLC7CD.O05
First title for last output file is: 2001 RBEC- NO2 OIL 501G 59F&100%/SH 59F&75% LOAD FH&CS CONDO 12/31/08
Second title for last output file is: NO2 EMISSION RATES PER CTS NOTE: ALL IDS ARE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: MG					
Annual					
	2001	0.81463	594330.	2960240.	01123124
	2002	1.01430	594330.	2960240.	02123124
	2003	1.04832	594330.	2960240.	03123124
	2004	1.01834	594330.	2960240.	04123124
	2005	1.39595	594330.	2960240.	05123124
SOURCE GROUP ID: SH					
Annual					
	2001	1.01640	594330.	2960240.	01123124
	2002	1.23762	594330.	2960240.	02123124
	2003	1.27305	594330.	2960240.	03123124
	2004	1.22711	594330.	2960240.	04123124
	2005	1.71117	594330.	2960240.	05123124
SOURCE GROUP ID: MGC7					
Annual					
	2001	2.85413	594305.	2960240.	01123124
	2002	3.51595	594330.	2960240.	02123124
	2003	3.25092	594330.	2960240.	03123124
	2004	2.67711	594330.	2960240.	04123124
	2005	3.15757	594280.	2960240.	05123124
SOURCE GROUP ID: SHC7					
Annual					
	2001	2.88789	594305.	2960240.	01123124
	2002	3.56450	594330.	2960240.	02123124
	2003	3.29857	594330.	2960240.	03123124
	2004	2.72298	594330.	2960240.	04123124
	2005	3.21465	594280.	2960240.	05123124

All receptor computations reported with respect to a user-specified origin
GRID 0.00 0.00
DISCRETE 0.00 0.00

```
CO STARTING
  TITLEONE 2001 RBEC- NO2 OIL 501G 59F&100%/SH 59F&75% LOAD FH&CS CONDO 12/31/08
  TITLETWO NO2 EMISSION RATES PER CTS  NOTE: ALL IDS ARE SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME PERIOD
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
****************************************
** ISCST3 Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA7559 POINT 594125.983 2960797.999 1.000
  LOCATION MGB7559 POINT 594172.071 2960797.963 1.000
  LOCATION MGC7559 POINT 594274.233 2960797.946 1.000

  LOCATION SHA7559 POINT 594125.983 2960797.999 1.000
  LOCATION SHB7559 POINT 594172.071 2960797.963 1.000
  LOCATION SHC7559 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** 100% load, 59 F
  SRCPARAM MGA7559 9.14   45.4  453.7  23.03  6.71
  SRCPARAM MGB7559 9.14   45.4  453.7  23.03  6.71
  SRCPARAM MGC7559 9.14   45.4  453.7  23.03  6.71

** 75% load, 59 F
  SRCPARAM SHA7559 8.16   45.4  448.7  18.04  6.71
  SRCPARAM SHB7559 8.16   45.4  448.7  18.04  6.71
  SRCPARAM SHC7559 8.16   45.4  448.7  18.04  6.71

  SRCPARAM FGH1  0.12 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.558 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.558 12.2 729.800 49.50000 0.305


** Building Downwash **
SO BUILDHGT MGA7559     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7559     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA7559     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7559     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA7559     10.39  29.43  29.09  27.87  25.81  22.95
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SO BUILDLEN MGA7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGA7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7559     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA7559    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA7559    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA7559     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA7559      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA7559     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA7559    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA7559    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA7559    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA7559    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA7559      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA7559     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA7559     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB7559     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7559     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB7559     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7559     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB7559     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7559     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB7559    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB7559    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB7559     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB7559      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB7559     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB7559    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB7559    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB7559     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB7559    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB7559      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB7559      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB7559     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC7559     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7559     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC7559     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7559     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC7559     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7559     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC7559    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC7559    -112.31 -111.55 -107.40 -4.08  -2.88  -1.60
SO XBADJ    MGC7559     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC7559      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC7559     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC7559    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
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SO YBADJ   MGC7559    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ   MGC7559     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ   MGC7559    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC7559      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC7559     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC7559     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA7559    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7559    23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID SHA7559    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7559    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA7559    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7559    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA7559    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7559    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA7559    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7559    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA7559   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA7559   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA7559    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA7559     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA7559    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA7559   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA7559   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA7559   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA7559   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA7559     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA7559    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA7559    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB7559    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7559    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB7559    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7559    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB7559    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB7559    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7559    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB7559    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7559    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB7559    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB7559    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7559    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB7559   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB7559   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB7559    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB7559     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB7559    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB7559   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB7559   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB7559    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB7559   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB7559     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB7559     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB7559    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC7559    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7559    23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT SHC7559     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7559     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID SHC7559     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7559     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC7559     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC7559     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7559     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC7559     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7559     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC7559     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC7559     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7559     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC7559    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC7559    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    SHC7559     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC7559      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC7559     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC7559    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC7559    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC7559     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC7559    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC7559      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC7559     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC7559     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1     0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1     0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1     0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1   -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1   -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1   -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1     0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1    19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1     6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1    17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1     5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1   -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1     0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1    -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1    22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1    23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1    29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1    36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1    29.54  32.73  34.93  36.07  36.11  35.05
```

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SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE1     19.41  15.27  10.67  18.85  22.89  19.15
SO BUILDLEN CSE1     18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ    CSE1    -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ    CSE1    -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ    CSE1   -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ    CSE1   -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ    CSE1   -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ    CSE1   -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ    CSE1     2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ    CSE1    14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ    CSE1    11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ    CSE1    -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ    CSE1    -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ    CSE1    -4.10 -15.99  -7.49  -5.11  -2.58   0.03

SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ    CSE2    -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ    CSE2    -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ    CSE2   -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ    CSE2   -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ    CSE2   -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ    CSE2   -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ    CSE2     1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ    CSE2     9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ    CSE2     7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ    CSE2    -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ    CSE2     2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ    CSE2    -0.27 -12.78  -4.99  -3.40  -1.71   0.03

SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3     6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ    CSE3   -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ    CSE3    -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ    CSE3   -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ    CSE3   -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ    CSE3   -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ    CSE3   -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
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SO YBADJ   CSE3     0.90   1.75   2.54   3.25   3.87 -16.57
SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
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SO BUILDHGT CSE6     23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE6      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6     29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6     17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6     18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE6    -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ   CSE6     41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ   CSE6     -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ   CSE6     -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ   CSE6    -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ   CSE6    -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ   CSE6     -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ   CSE6    -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ   CSE6     -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ   CSE6      1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ   CSE6     20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ   CSE6     15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7      6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7     32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7     29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE7    -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ   CSE7     40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ   CSE7     -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ   CSE7     -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ   CSE7    -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ   CSE7    -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ   CSE7     -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ   CSE7    -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ   CSE7    -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ   CSE7      2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ   CSE7     25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ   CSE7     11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA7559 MGB7559 MGC7559 FGH1
  SRCGROUP SH SHA7559 SHB7559 SHC7559 FGH1
  SRCGROUP MGC7 MGA7559 MGB7559 MGC7559 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA7559 SHB7559 SHC7559 FGH1 CSE1-CSE7

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
```

```
**
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********************************************
** AERMOD Meteorology Pathway
**********************************************
**
**
ME STARTING
** SURFFILE C:\amodmet\PBIMIA01.SFC
** PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********************************************
** AERMOD Output Pathway
**********************************************
**
**
OU STARTING
  RECTABLE ALLAVE FIRST
OU FINISHED
**
```

PREDICTED CO IMPACTS FOR RBEC

1. SUMMARY FILES FOR
   - CTS/HRSGS AND FUEL HEATER
   - CTS/HRSGS, FUEL HEATER, AND GAS COMPRESSOR STATION
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :COMIXC7.001
AERMOD OUTPUT FILE NUMBER 2 :COMIXC7.002
AERMOD OUTPUT FILE NUMBER 3 :COMIXC7.003
AERMOD OUTPUT FILE NUMBER 4 :COMIXC7.004
AERMOD OUTPUT FILE NUMBER 5 :COMIXC7.005
First title for last output file is: 2001 RBEC- CO 501G OIL/35F/75%LD SH-GAS/35/75 FH&CS 12/31/0
Second title for last output file is: CO EMISSION RATES PER CTS NOTE: ALL IDS SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID:	MG				
HIGH 8-Hour					
	2001	33.30508	593300.	2960500.	01100916
	2002	31.46400	593700.	2961600.	02030216
	2003	29.81291	593600.	2961200.	03062916
	2004	45.85555	594700.	2961600.	04090508
	2005	32.35250	593300.	2961400.	05102408
HSH 8-Hour					
	2001	28.56576	593400.	2960500.	01050416
	2002	26.84847	593700.	2961500.	02032016
	2003	27.36108	593700.	2961400.	03040816
	2004	28.34106	593400.	2961100.	04051116
	2005	28.75385	593500.	2961300.	05092116
HIGH 1-Hour					
	2001	39.85001	593400.	2960800.	01042212
	2002	42.38450	593500.	2961100.	02081511
	2003	41.20982	593500.	2960800.	03083112
	2004	102.16640	594900.	2960700.	04092520
	2005	69.77048	593400.	2961300.	05102407
HSH 1-Hour					
	2001	38.54338	593400.	2960500.	01042914
	2002	41.93054	593500.	2961100.	02051713
	2003	40.32925	593500.	2960800.	03091412
	2004	85.31238	594900.	2960500.	04090420
	2005	66.56413	593400.	2961300.	05102406
SOURCE GROUP ID:	SH				
HIGH 8-Hour					
	2001	17.59336	594290.	2960833.	01021708
	2002	15.36282	594335.	2960832.	02060308
	2003	18.21273	594123.	2960837.	03071116
	2004	17.21189	594123.	2960837.	04110416
	2005	19.55586	594335.	2960832.	05012708
HSH 8-Hour					
	2001	14.86632	594123.	2960837.	01021016
	2002	13.55254	594123.	2960837.	02123108
	2003	16.16705	594123.	2960837.	03060616
	2004	14.65682	594123.	2960837.	04061116
	2005	14.97360	594123.	2960837.	05010716
HIGH 1-Hour					
	2001	32.94715	594201.	2960835.	01071213
	2002	31.48403	594201.	2960835.	02040110
	2003	31.97361	594201.	2960835.	03031813
	2004	34.41792	594201.	2960835.	04040811
	2005	34.26407	594201.	2960835.	05122815
HSH 1-Hour					
	2001	32.88698	594201.	2960835.	01070909
	2002	29.50044	594359.	2960798.	02052824
	2003	31.89261	594201.	2960835.	03092610
	2004	34.19614	594201.	2960835.	04062209
	2005	33.17517	594201.	2960835.	05061915
SOURCE GROUP ID:	MGC7				
HIGH 8-Hour					
	2001	74.54823	593951.	2960723.	01103024
	2002	65.00163	593951.	2960762.	02030608
	2003	63.44714	593951.	2960762.	03111724
	2004	73.35175	593951.	2960762.	04111024
	2005	69.87435	593951.	2960762.	05012824
HSH 8-Hour					
	2001	71.25525	593951.	2960723.	01100924
	2002	59.12577	593951.	2960762.	02120908

	2003	59.40890	593952.	2960802.	03111808
	2004	67.42438	593951.	2960762.	04123124
	2005	69.10902	593951.	2960762.	05010224
HIGH 1-Hour					
	2001	142.40285	593800.	2960700.	01080723
	2002	145.39798	593700.	2960700.	02041905
	2003	142.51851	593800.	2960700.	03100324
	2004	147.76279	593700.	2960700.	04010123
	2005	142.12004	593700.	2960700.	05120321
HSH 1-Hour					
	2001	140.34848	593800.	2960700.	01111902
	2002	124.87840	593700.	2960800.	02091702
	2003	140.21754	593800.	2960700.	03051323
	2004	141.40865	593700.	2960700.	04072222
	2005	137.26949	593700.	2960700.	05072101
SOURCE GROUP ID:	SHC7				
HIGH 8-Hour					
	2001	74.54000	593951.	2960723.	01103024
	2002	64.97389	593951.	2960762.	02030608
	2003	63.40622	593951.	2960762.	03111724
	2004	73.31760	593951.	2960762.	04111024
	2005	69.88779	593951.	2960762.	05012824
HSH 8-Hour					
	2001	71.26528	593951.	2960723.	01100924
	2002	59.12152	593951.	2960762.	02120908
	2003	59.40369	593952.	2960802.	03111808
	2004	67.36273	593951.	2960762.	04123124
	2005	69.10539	593951.	2960762.	05010224
HIGH 1-Hour					
	2001	142.39821	593800.	2960700.	01080723
	2002	145.38808	593700.	2960700.	02041905
	2003	142.50766	593800.	2960700.	03100324
	2004	147.75185	593700.	2960700.	04010123
	2005	142.10858	593700.	2960700.	05120321
HSH 1-Hour					
	2001	140.33714	593800.	2960700.	01111902
	2002	124.86784	593700.	2960800.	02091702
	2003	140.21356	593800.	2960700.	03051323
	2004	141.40408	593700.	2960700.	04072222
	2005	137.26543	593700.	2960700.	05072101

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

AERBOB RELEASE 020304

AERMOD OUTPUT FILE NUMBER 1 :NO2OILC7.O01
AERMOD OUTPUT FILE NUMBER 2 :NO2OILC7.O02
AERMOD OUTPUT FILE NUMBER 3 :NO2OILC7.O03
AERMOD OUTPUT FILE NUMBER 4 :NO2OILC7.O04
AERMOD OUTPUT FILE NUMBER 5 :NO2OILC7.O05
First title for last output file is: 2001 RBEC- NO2 OIL 501G 59F&100%/SH 59F&75% LOAD FH&CS 12/31
Second title for last output file is: NO2 EMISSION RATES PER CTS NOTE: ALL IDS ARE SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID:	MG				
Annual					
	2001	1.95072	594037.	2960840.	01123124
	2002	2.19606	594037.	2960840.	02123124
	2003	1.85576	594123.	2960837.	03123124
	2004	1.81328	594037.	2960840.	04123124
	2005	1.65497	594123.	2960837.	05123124
SOURCE GROUP ID:	SH				
Annual					
	2001	1.95072	594037.	2960840.	01123124
	2002	2.19606	594037.	2960840.	02123124
	2003	1.85576	594123.	2960837.	03123124
	2004	1.81328	594037.	2960840.	04123124
	2005	1.65497	594123.	2960837.	05123124
SOURCE GROUP ID:	MGC7				
Annual					
	2001	21.46101	593951.	2960762.	01123124
	2002	20.00818	593952.	2960802.	02123124
	2003	16.47338	593952.	2960802.	03123124
	2004	22.84689	593951.	2960762.	04123124
	2005	18.03088	593900.	2960800.	05123124
SOURCE GROUP ID:	SHC7				
Annual					
	2001	21.46101	593951.	2960762.	01123124
	2002	20.00818	593952.	2960802.	02123124
	2003	16.47338	593952.	2960802.	03123124
	2004	22.84689	593951.	2960762.	04123124
	2005	18.03088	593900.	2960800.	05123124

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- CO 501G OIL/35F/75%LD SH-GAS/35/75 FH&CS  12/31/08
  TITLETWO CO EMISSION RATES PER CTS   NOTE: ALL IDS SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME 8 1
  POLLUTID GEN
  RUNORNOT RUN
CO FINISHED
**
**********************************************
** ISCST3 Source Pathway
**********************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA7595 POINT 594125.983 2960797.999 1.000
  LOCATION MGB7595 POINT 594172.071 2960797.963 1.000
  LOCATION MGC7595 POINT 594274.233 2960797.946 1.000

  LOCATION SHA7595 POINT 594125.983 2960797.999 1.000
  LOCATION SHB7595 POINT 594172.071 2960797.963 1.000
  LOCATION SHC7595 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** 75% load, 35 F  OIL 501G
  SRCPARAM MGA7595 28.77   45.4  449.8  23.10  6.71
  SRCPARAM MGB7595 28.77   45.4  449.8  23.10  6.71
  SRCPARAM MGC7595 28.77   45.4  449.8  23.10  6.71
** 75% load, 35 F  GAS SH
  SRCPARAM SHA7595 6.17    45.4  357.6  15.02  6.71
  SRCPARAM SHB7595 6.17    45.4  357.6  15.02  6.71
  SRCPARAM SHC7595 6.17    45.4  357.6  15.02  6.71

  SRCPARAM FGH1  0.101 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.149 12.2 729.800 49.50000 0.305


** Building Downwash **
SO BUILDHGT MGA7595     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA7595     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA7595     10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7595     25.81  27.87  29.09  29.43  28.87  27.43
```

```
SO BUILDLEN MGA7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7595     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA7595    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA7595    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA7595     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA7595      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA7595     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA7595    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA7595    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA7595    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA7595    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA7595      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA7595     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA7595     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB7595     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB7595     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB7595     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB7595    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB7595    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB7595     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB7595      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB7595     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB7595    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB7595    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB7595     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB7595    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB7595      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB7595      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB7595     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC7595     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC7595    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    MGC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
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SO YBADJ   MGC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA7595    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA7595    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA7595     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA7595      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA7595     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA7595    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA7595    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA7595    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA7595    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA7595      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA7595     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA7595     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB7595    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB7595    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB7595     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB7595      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB7595     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB7595    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB7595    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB7595     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB7595    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB7595      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB7595      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB7595     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  29.57  29.57
```

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SO BUILDWID SHC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC7595    -112.31 -111.55 -107.40 -4.08  -2.88  -1.60
SO XBADJ    SHC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1      0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1      0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1      0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1    -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1    -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1    -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1      0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1     19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1      6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1     17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1      5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1    -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1      0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1     -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1     22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1     23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1     29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1     36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1     29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1     17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1     20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE1     19.41  15.27  10.67  18.85  22.89  19.15
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SO BUILDLEN CSE1     18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE1     -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ   CSE1     -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ   CSE1    -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ   CSE1    -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ   CSE1    -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ   CSE1    -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ   CSE1      2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ   CSE1     14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ   CSE1     11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ   CSE1     -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ   CSE1     -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ   CSE1     -4.10 -15.99  -7.49  -5.11  -2.58   0.03


SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2     6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2    15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2    29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2    36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2    19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE2     -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ   CSE2     -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ   CSE2    -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ   CSE2    -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ   CSE2    -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ   CSE2    -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ   CSE2      1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ   CSE2      9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ   CSE2      7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ   CSE2     -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ   CSE2      2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ   CSE2     -0.27 -12.78  -4.99  -3.40  -1.71   0.03


SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3     6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3     6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3    29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3    32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3    15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3    29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3    17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3    29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3    36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3    19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE3    -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ   CSE3     -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ   CSE3    -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ   CSE3    -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ   CSE3    -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ   CSE3    -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ   CSE3      0.90   1.75   2.54   3.25   3.87 -16.57
SO YBADJ   CSE3      4.73   4.95   5.03  22.49   4.71   4.34
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SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
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SO BUILDHGT CSE6      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6     29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6     17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6     18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE6    -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ   CSE6     41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ   CSE6     -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ   CSE6     -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ   CSE6    -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ   CSE6    -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ   CSE6     -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ   CSE6    -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ   CSE6     -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ   CSE6      1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ   CSE6     20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ   CSE6     15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7      6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7     32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7     29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE7    -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ   CSE7     40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ   CSE7     -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ   CSE7     -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ   CSE7    -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ   CSE7    -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ   CSE7     -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ   CSE7    -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ   CSE7    -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ   CSE7      2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ   CSE7     25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ   CSE7     11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA7595 MGB7595 MGC7595 FGH1
  SRCGROUP SH SHA7595 SHB7595 SHC7595 FGH1
  SRCGROUP MGC7 MGA7595 MGB7595 MGC7595 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA7595 SHB7595 SHC7595 FGH1 CSE1-CSE7

SO FINISHED
**
**********
** ISCST3 Receptor Pathway
**********
**
**
RE STARTING
```

```
  INCLUDED RIVFHCS.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
**   SURFFILE C:\amodmet\PBIMIA01.SFC
**   PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST SECOND
OU FINISHED
**
```

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :COMXC7CD.O01
AERMOD OUTPUT FILE NUMBER 2 :COMXC7CD.O02
AERMOD OUTPUT FILE NUMBER 3 :COMXC7CD.O03
AERMOD OUTPUT FILE NUMBER 4 :COMXC7CD.O04
AERMOD OUTPUT FILE NUMBER 5 :COMXC7CD.O05
First title for last output file is: 2001 RBEC- CO 501G OIL/95F/75%LD SH-GAS/35/75 FH&CS CONDO 12/31/08
Second title for last output file is: CO EMISSION RATES PER CTS NOTE: ALL IDS SAME

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: MG					
HIGH 8-Hour					
	2001	88.53175	594330.	2960240.	01100308
	2002	63.04885	594330.	2960240.	02011908
	2003	74.84570	594280.	2960240.	03112916
	2004	94.72186	594280.	2960240.	04090408
	2005	102.11508	594280.	2960240.	05122324
HSH 8-Hour					
	2001	54.98667	594330.	2960240.	01010124
	2002	56.23837	594330.	2960240.	02110224
	2003	63.42498	594305.	2960240.	03090924
	2004	92.48181	594280.	2960240.	04101624
	2005	82.68295	594330.	2960240.	05122324
HIGH 1-Hour					
	2001	210.74176	594280.	2960240.	01122020
	2002	231.69304	594330.	2960240.	02010820
	2003	216.10117	594305.	2960240.	03091124
	2004	222.59418	594280.	2960240.	04021821
	2005	236.52953	594330.	2960240.	05013103
HSH 1-Hour					
	2001	190.52971	594330.	2960240.	01110922
	2002	213.16574	594330.	2960240.	02040402
	2003	208.86214	594330.	2960240.	03101601
	2004	208.83766	594280.	2960240.	04101621
	2005	233.94472	594330.	2960240.	05050705
SOURCE GROUP ID: SH					
HIGH 8-Hour					
	2001	90.25674	594330.	2960240.	01100308
	2002	57.79233	594330.	2960240.	02011908
	2003	67.43221	594280.	2960240.	03090924
	2004	91.70209	594280.	2960240.	04101624
	2005	94.92687	594330.	2960240.	05101108
HSH 8-Hour					
	2001	55.84821	594330.	2960240.	01082608
	2002	55.04856	594330.	2960240.	02110224
	2003	60.79847	594305.	2960240.	03122708
	2004	59.60693	594305.	2960240.	04120508
	2005	83.61820	594305.	2960240.	05101108
HIGH 1-Hour					
	2001	208.85710	594330.	2960240.	01082604
	2002	221.10493	594330.	2960240.	02040402
	2003	238.81950	594305.	2960240.	03091124
	2004	216.50963	594280.	2960240.	04101621
	2005	254.79442	594280.	2960240.	05072204
HSH 1-Hour					
	2001	192.39581	594330.	2960240.	01110922
	2002	209.10414	594330.	2960240.	02100803
	2003	231.43140	594280.	2960240.	03111320
	2004	199.72672	594280.	2960240.	04102724
	2005	234.43832	594330.	2960240.	05082306
SOURCE GROUP ID: MGC7					
HIGH 8-Hour					
	2001	88.81414	594330.	2960240.	01100308
	2002	63.04885	594330.	2960240.	02011908
	2003	75.77636	594280.	2960240.	03112916
	2004	94.75791	594280.	2960240.	04090408
	2005	102.11627	594280.	2960240.	05122324
HSH 8-Hour					
	2001	54.98669	594330.	2960240.	01010124

2002	56.24176	594330.	2960240.	02110224
2003	63.42812	594305.	2960240.	03090924
2004	92.49044	594280.	2960240.	04101624
2005	82.68404	594330.	2960240.	05122324

HIGH 1-Hour

2001	210.74176	594280.	2960240.	01122020
2002	231.69304	594330.	2960240.	02010820
2003	216.10117	594305.	2960240.	03091124
2004	222.59418	594280.	2960240.	04021821
2005	236.52953	594330.	2960240.	05013103

HSH 1-Hour

2001	190.52971	594330.	2960240.	01110922
2002	213.16574	594330.	2960240.	02040402
2003	208.86214	594330.	2960240.	03101601
2004	208.83766	594280.	2960240.	04101621
2005	233.94472	594330.	2960240.	05050705

SOURCE GROUP ID: SHC7

HIGH 8-Hour

2001	90.53912	594330.	2960240.	01100308
2002	57.79233	594330.	2960240.	02011908
2003	67.43540	594280.	2960240.	03090924
2004	91.71071	594280.	2960240.	04101624
2005	95.50737	594330.	2960240.	05101108

HSH 8-Hour

2001	56.40727	594330.	2960240.	01082608
2002	55.05194	594330.	2960240.	02110224
2003	60.79847	594305.	2960240.	03122708
2004	59.62011	594305.	2960240.	04120508
2005	84.31770	594305.	2960240.	05101108

HIGH 1-Hour

2001	208.85710	594330.	2960240.	01082604
2002	221.10493	594330.	2960240.	02040402
2003	238.81950	594305.	2960240.	03091124
2004	216.50963	594280.	2960240.	04101621
2005	254.79442	594280.	2960240.	05072204

HSH 1-Hour

2001	192.39581	594330.	2960240.	01110922
2002	209.10414	594330.	2960240.	02100803
2003	231.43140	594280.	2960240.	03111320
2004	199.72672	594280.	2960240.	04102724
2005	234.43832	594330.	2960240.	05082306

All receptor computations reported with respect to a user-specified origin

GRID	0.00	0.00
DISCRETE	0.00	0.00

```
CO STARTING
  TITLEONE 2001 RBEC- CO 501G OIL/95F/75%LD SH-GAS/35/75 FH&CS CONDO 12/31/08
  TITLETWO CO EMISSION RATES PER CTS   NOTE: ALL IDS SAME
  MODELOPT DFAULT CONC NOWARN
  AVERTIME 8 1
  POLLUTID GEN
  RUNORNOT RUN
  FLAGPOLE
CO FINISHED
**
****************************************
** ISCST3 Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **

  LOCATION MGA7595 POINT 594125.983 2960797.999 1.000
  LOCATION MGB7595 POINT 594172.071 2960797.963 1.000
  LOCATION MGC7595 POINT 594274.233 2960797.946 1.000

  LOCATION SHA7595 POINT 594125.983 2960797.999 1.000
  LOCATION SHB7595 POINT 594172.071 2960797.963 1.000
  LOCATION SHC7595 POINT 594274.233 2960797.946 1.000

  LOCATION FGH1 POINT 594155.571 2960783.547 1.000

  LOCATION CSE1 POINT 594070.600 2960755.500 1.000
  LOCATION CSE2 POINT 594070.600 2960760.500 1.000
  LOCATION CSE3 POINT 594070.600 2960765.500 1.000
  LOCATION CSE4 POINT 594070.600 2960770.500 1.000
  LOCATION CSE5 POINT 594070.600 2960775.500 1.000
  LOCATION CSE6 POINT 594070.600 2960780.500 1.000
  LOCATION CSE7 POINT 594070.600 2960785.500 1.000

** Source Parameters **
** 75% load, 95 F  OIL 501G
  SRCPARAM MGA7595 25.20   45.4  447.0  20.80  6.71
  SRCPARAM MGB7595 25.20   45.4  447.0  20.80  6.71
  SRCPARAM MGC7595 25.20   45.4  447.0  20.80  6.71
** 75% load, 35 F  GAS SH
  SRCPARAM SHA7595 6.17    45.4  357.6  15.02  6.71
  SRCPARAM SHB7595 6.17    45.4  357.6  15.02  6.71
  SRCPARAM SHC7595 6.17    45.4  357.6  15.02  6.71

  SRCPARAM FGH1  0.101 9.144 533.150 32.02 0.305

  SRCPARAM CSE1 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE2 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE3 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE4 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE5 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE6 0.149 12.2 729.800 49.50000 0.305
  SRCPARAM CSE7 0.149 12.2 729.800 49.50000 0.305


** Building Downwash **
SO BUILDHGT MGA7595     29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGA7595     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID MGA7595     18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGA7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGA7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGA7595     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN MGA7595     10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
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SO BUILDLEN MGA7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGA7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGA7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGA7595     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    MGA7595    -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ    MGA7595    -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ    MGA7595     -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ    MGA7595      4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ    MGA7595     -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ    MGA7595    -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ    MGA7595    -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ    MGA7595    -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ    MGA7595    -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ    MGA7595      3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ    MGA7595     18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ    MGA7595     14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT MGB7595     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGB7595     23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID MGB7595     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID MGB7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGB7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGB7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGB7595     27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN MGB7595     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN MGB7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGB7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGB7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGB7595     25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ    MGB7595    -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ    MGB7595    -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ    MGB7595     -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ    MGB7595      4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ    MGB7595     39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ    MGB7595    -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ    MGB7595    -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ    MGB7595     -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ    MGB7595    -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ    MGB7595      3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ    MGB7595      2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ    MGB7595     14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT MGC7595     29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT MGC7595     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID MGC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID MGC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID MGC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID MGC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID MGC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN MGC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN MGC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN MGC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN MGC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN MGC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    MGC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    MGC7595    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    MGC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    MGC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    MGC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    MGC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    MGC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
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SO YBADJ   MGC7595    16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ   MGC7595   -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ   MGC7595     3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ   MGC7595    18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ   MGC7595    14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT SHA7595    29.57  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHA7595    23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID SHA7595    18.85  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHA7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHA7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHA7595    27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN SHA7595    10.39  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHA7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHA7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHA7595    25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ   SHA7595   -87.54 -32.91 -31.26 -28.65 -25.18 -20.94
SO XBADJ   SHA7595   -16.07 -10.71  -5.02  -3.94  -2.74  -1.46
SO XBADJ   SHA7595    -0.14   1.19   2.48   3.70   4.80   5.76
SO XBADJ   SHA7595     4.69   3.48   2.17   0.78  -0.62  -2.01
SO XBADJ   SHA7595    -3.34  -4.56  -5.65 -11.33 -16.66 -21.49
SO XBADJ   SHA7595   -25.67 -29.06 -31.57 -100.73 -87.54 -87.32
SO YBADJ   SHA7595   -14.51  -6.96 -10.01 -12.76 -15.13 -17.03
SO YBADJ   SHA7595   -18.41 -19.24 -19.48 -19.13 -18.20 -16.71
SO YBADJ   SHA7595   -14.72 -12.28  -9.46  -6.36  -3.07   0.32
SO YBADJ   SHA7595     3.69   6.96  10.01  12.76  15.13  17.03
SO YBADJ   SHA7595    18.41  19.24  19.48  19.13  18.20  16.71
SO YBADJ   SHA7595    14.72  12.28   9.46 -14.45  14.53   0.01

SO BUILDHGT SHB7595    29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHB7595    23.47  23.47  23.47  23.17  29.57  29.57
SO BUILDWID SHB7595    18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHB7595    15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHB7595    29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHB7595    27.87  25.81  22.95  27.91  18.85  17.83
SO BUILDLEN SHB7595    10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHB7595    28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHB7595    19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHB7595    25.81  27.87  29.09  47.73  10.39   7.41
SO XBADJ   SHB7595   -87.51 -100.83 -103.09 -58.25 -60.46 -60.84
SO XBADJ   SHB7595   -59.36 -56.09 -51.10  -4.13  -2.91  -1.59
SO XBADJ   SHB7595    -0.23   1.14   2.48   3.74   4.89   5.88
SO XBADJ   SHB7595     4.85   3.67   2.38  30.38  34.66  37.88
SO XBADJ   SHB7595    39.96  40.82  40.44 -11.14 -16.50 -21.36
SO XBADJ   SHB7595   -25.58 -29.01 -31.57 -109.53 -87.41 -87.24
SO YBADJ   SHB7595   -14.22  14.74  -1.86  22.56  14.53   6.05
SO YBADJ   SHB7595    -2.62 -11.20 -19.44 -19.29 -18.38 -16.92
SO YBADJ   SHB7595   -14.95 -12.52  -9.71  -6.61  -3.31   0.10
SO YBADJ   SHB7595     3.50   6.80   9.89 -22.56 -14.53  -6.05
SO YBADJ   SHB7595     2.62  11.20  19.44  19.29  18.38  16.92
SO YBADJ   SHB7595    14.95  12.52   9.71 -23.01  14.79   0.29

SO BUILDHGT SHC7595    29.57  23.17  23.17  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT SHC7595    23.47  23.47  23.47  23.47  23.47  23.47
```

```
SO BUILDHGT SHC7595     23.47  23.47  23.47  23.47  29.57  29.57
SO BUILDWID SHC7595     18.85  27.91  34.24  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  15.27  10.67
SO BUILDWID SHC7595     15.27  19.41  22.95  25.81  27.87  29.09
SO BUILDWID SHC7595     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID SHC7595     27.87  25.81  22.95  19.41  18.85  17.83
SO BUILDLEN SHC7595     10.39  47.73  46.38  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  28.87  27.43
SO BUILDLEN SHC7595     28.87  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN SHC7595     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN SHC7595     25.81  27.87  29.09  29.43  10.39   7.41
SO XBADJ    SHC7595    -87.49 -109.62 -111.69 -28.71 -25.26 -21.04
SO XBADJ    SHC7595    -112.31 -111.55 -107.40  -4.08  -2.88  -1.60
SO XBADJ    SHC7595     -0.27   1.08   2.38   3.62   4.75   5.73
SO XBADJ    SHC7595      4.68   3.50   2.20   0.84  -0.54  -1.91
SO XBADJ    SHC7595     -3.22  -4.44  -5.52 -11.19 -16.52 -21.36
SO XBADJ    SHC7595    -25.54 -28.95 -31.47 -33.05 -87.46 -87.25
SO YBADJ    SHC7595    -14.43  23.32   8.08 -12.64 -15.01 -16.93
SO YBADJ    SHC7595     16.51  -1.56 -19.58 -19.12 -18.21 -16.75
SO YBADJ    SHC7595    -14.78 -12.36  -9.56  -6.48  -3.20   0.18
SO YBADJ    SHC7595      3.56   6.82   9.88  12.64  15.01  16.93
SO YBADJ    SHC7595     18.33  19.18  19.44  19.12  18.21  16.75
SO YBADJ    SHC7595     14.78  12.36   9.56   6.48  14.59   0.08

SO BUILDHGT FGH1     29.57  29.57  29.57  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47   0.00   0.00
SO BUILDHGT FGH1      0.00  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT FGH1     23.47  23.47  23.47  29.57  29.57  29.57
SO BUILDWID FGH1     18.85  19.29  19.15  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.41   0.00   0.00
SO BUILDWID FGH1      0.00  19.41  22.95  25.81  27.87  29.09
SO BUILDWID FGH1     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID FGH1     27.87  25.81  22.95  19.29  18.85  17.83
SO BUILDLEN FGH1     10.39  13.06  15.33  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  29.43   0.00   0.00
SO BUILDLEN FGH1      0.00  29.43  29.09  27.87  25.81  22.95
SO BUILDLEN FGH1     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN FGH1     25.81  27.87  29.09  13.06  10.39   7.41
SO XBADJ    FGH1    -78.45 -81.64 -82.36 -36.60 -38.56 -39.34
SO XBADJ    FGH1    -38.93 -37.33 -34.60 -35.59 -35.49 -34.31
SO XBADJ    FGH1    -32.09   0.71  -1.76  -4.16   0.00   0.00
SO XBADJ    FGH1      0.00 -15.52   4.44   8.73  12.75  16.39
SO XBADJ    FGH1     19.52  22.06  23.94  20.32  16.08  11.36
SO XBADJ    FGH1      6.29 -28.58 -27.33 -77.03 -76.08 -72.82
SO YBADJ    FGH1     17.14   4.16  -8.95  19.19  14.96  10.28
SO YBADJ    FGH1      5.29   0.13  -5.03 -10.03 -14.74 -18.99
SO YBADJ    FGH1    -22.67   9.38  11.78  13.82   0.00   0.00
SO YBADJ    FGH1      0.00  17.37 -22.84 -19.19 -14.96 -10.28
SO YBADJ    FGH1     -5.29  -0.13   5.03  10.03  14.74  18.99
SO YBADJ    FGH1     22.67  -9.38 -11.78   8.41  -3.96 -16.21

SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE1      6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE1     23.47  23.47  23.47  10.67  10.67  29.57
SO BUILDHGT CSE1     29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  34.93
SO BUILDWID CSE1     36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE1     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE1     15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE1     29.43  28.87  27.43  34.14  34.79  15.33
SO BUILDWID CSE1     17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  25.44
SO BUILDLEN CSE1     20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE1     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE1     36.11  36.07  34.93  32.73  25.81  22.95
```

```
SO BUILDLEN CSE1    19.41  15.27  10.67  18.85  22.89  19.15
SO BUILDLEN CSE1    18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE1    -3.26  -3.92  -4.47  -4.87  44.56  -5.23
SO XBADJ   CSE1    -5.18  -4.96  -4.60 -10.18 -15.46 -20.26
SO XBADJ   CSE1   -24.45 -27.89 -30.49 -32.16 -32.86 -32.55
SO XBADJ   CSE1   -32.85 -32.14 -30.46 -27.86 -70.37 -71.22
SO XBADJ   CSE1   -69.92 -66.49 -61.03 -71.09 -75.74 -78.08
SO XBADJ   CSE1   -78.05 -75.65  -4.44  -3.90  -3.25  -2.50
SO YBADJ   CSE1     2.64   5.17   7.54   9.68 -18.17  13.03
SO YBADJ   CSE1    14.13  14.80  15.03  14.79  14.11  13.00
SO YBADJ   CSE1    11.49   9.64   7.49   5.11   2.58  -0.03
SO YBADJ   CSE1    -2.64  -5.17  -7.54  -9.68  18.17   7.91
SO YBADJ   CSE1    -2.58 -13.00 -23.02  19.00   8.83   7.92
SO YBADJ   CSE1    -4.10 -15.99  -7.49  -5.11  -2.58   0.03

SO BUILDHGT CSE2    6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE2    6.10   6.10   6.10   6.10  23.47  23.47
SO BUILDHGT CSE2   23.47  23.47  23.47   6.10   6.10  29.57
SO BUILDHGT CSE2   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE2   15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2   36.07  36.11  35.05  36.11  36.07  34.93
SO BUILDWID CSE2   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE2   15.09  20.58  25.44  29.54  27.87  29.09
SO BUILDWID CSE2   29.43  28.87  27.43  36.11  36.07  15.33
SO BUILDWID CSE2   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE2   36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2   20.58  15.09   9.14  15.09  20.58  25.44
SO BUILDLEN CSE2   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE2   36.11  36.07  34.93  32.73  25.81  22.95
SO BUILDLEN CSE2   19.41  15.27  10.67  15.09  20.58  19.15
SO BUILDLEN CSE2   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE2    -8.18  -8.62  -8.80  -8.70  41.35  45.77
SO XBADJ   CSE2    -6.89  -5.83  -4.60  -9.31 -13.75 -17.76
SO XBADJ   CSE2   -21.23 -24.06 -26.16 -27.46 -27.93 -27.55
SO XBADJ   CSE2   -27.92 -27.44 -26.13 -24.03 -67.15 -68.72
SO XBADJ   CSE2   -68.21 -65.62 -61.03  -5.78  -6.84 -80.58
SO XBADJ   CSE2   -81.27 -79.48  -8.77  -8.60  -8.18  -7.50
SO YBADJ   CSE2     1.77   3.46   5.04   6.47 -22.00 -12.24
SO YBADJ   CSE2     9.43   9.88  10.03   9.87   9.41   8.67
SO YBADJ   CSE2     7.66   6.42   4.99   3.40   1.71  -0.03
SO YBADJ   CSE2    -1.77  -3.46  -5.04  -6.47  22.00  12.24
SO YBADJ   CSE2     2.12  -8.07 -18.02  -9.87  -9.41  12.25
SO YBADJ   CSE2    -0.27 -12.78  -4.99  -3.40  -1.71   0.03

SO BUILDHGT CSE3    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3    6.10   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE3    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE3    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE3   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE3   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE3   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3   36.07  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE3   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE3   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE3   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE3   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE3   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3   20.58  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE3   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE3   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE3   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE3   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE3   -13.11 -13.32 -13.13 -12.53 -11.56  43.27
SO XBADJ   CSE3    -8.60  -6.70  -4.60  44.96 -12.04 -15.26
SO XBADJ   CSE3   -18.02 -20.23 -21.83 -22.77 -23.01 -22.55
SO XBADJ   CSE3   -23.00 -22.75 -21.80 -20.20 -17.98 -66.22
SO XBADJ   CSE3   -66.50 -64.75 -61.03 -60.23  -8.55 -10.19
SO XBADJ   CSE3   -84.48 -83.31 -13.10 -13.30 -13.10 -12.50
SO YBADJ   CSE3     0.90   1.75   2.54   3.25   3.87 -16.57
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SO YBADJ   CSE3     4.73   4.95   5.03  22.49   4.71   4.34
SO YBADJ   CSE3     3.83   3.21   2.49   1.69   0.85  -0.03
SO YBADJ   CSE3    -0.90  -1.75  -2.54  -3.25  -3.87  16.57
SO YBADJ   CSE3     6.82  -3.15 -13.02 -22.49  -4.71  -4.34
SO YBADJ   CSE3     3.56  -9.56  -2.49  -1.69  -0.85   0.03


SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47   6.10   6.10  23.47   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE4    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE4   23.47  23.47  23.47  23.47   6.10   6.10
SO BUILDHGT CSE4   29.57  29.57   6.10   6.10   6.10   6.10
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  36.11  35.05  28.87  36.07  34.93
SO BUILDWID CSE4   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE4   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE4   29.43  28.87  27.43  28.87  36.07  34.93
SO BUILDWID CSE4   17.14  18.42  25.44  20.58  15.09   9.14
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.09   9.14  15.27  20.58  25.44
SO BUILDLEN CSE4   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE4   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE4   19.41  15.27  10.67  15.27  20.58  25.44
SO BUILDLEN CSE4   18.42  17.14  34.93  36.07  36.11  35.05
SO XBADJ   CSE4  -18.03 -18.02 -17.46 -16.36 -14.77  40.77
SO XBADJ   CSE4   45.38  -7.57  -4.60  45.83 -10.33 -12.76
SO XBADJ   CSE4  -14.81 -16.40 -17.50 -18.07 -18.08 -17.55
SO XBADJ   CSE4  -18.07 -18.05 -17.47 -16.37 -14.76 -63.72
SO XBADJ   CSE4  -64.79 -63.88 -61.03 -61.10 -10.26 -12.69
SO XBADJ   CSE4  -87.70 -87.14 -17.43 -18.00 -18.02 -17.50
SO YBADJ   CSE4    0.03   0.04   0.04   0.04   0.04 -20.90
SO YBADJ   CSE4  -11.51   0.03   0.03  17.57   0.01   0.01
SO YBADJ   CSE4    0.00   0.00  -0.01  -0.02  -0.02  -0.03
SO YBADJ   CSE4   -0.03  -0.04  -0.04  -0.04  -0.04  20.90
SO YBADJ   CSE4   11.51   1.77  -8.02 -17.57  -0.01  -0.01
SO YBADJ   CSE4    7.39  -6.35   0.01   0.02   0.02   0.03


SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47   6.10   6.10  23.47  23.47   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE5    6.10   6.10   6.10   6.10   6.10  23.47
SO BUILDHGT CSE5   23.47  23.47  23.47  23.47  23.47   6.10
SO BUILDHGT CSE5   29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  36.11  35.05  28.87  29.43  34.93
SO BUILDWID CSE5   32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE5   15.09  20.58  25.44  29.54  32.73  29.09
SO BUILDWID CSE5   29.43  28.87  27.43  28.87  29.43  34.93
SO BUILDWID CSE5   17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.09   9.14  15.27  19.41  25.44
SO BUILDLEN CSE5   29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE5   36.11  36.07  34.93  32.73  29.54  22.95
SO BUILDLEN CSE5   19.41  15.27  10.67  15.27  19.41  25.44
SO BUILDLEN CSE5   18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE5  -22.96 -22.72 -21.79 -20.19 -17.99  38.27
SO XBADJ   CSE5   43.67  -8.44  -4.60  46.69  41.60 -10.26
SO XBADJ   CSE5  -11.59 -12.57 -13.17 -13.37 -13.16 -12.55
SO XBADJ   CSE5  -13.15 -13.35 -13.14 -12.54 -11.55 -61.23
SO XBADJ   CSE5  -63.08 -63.01 -61.03 -61.96 -61.01 -15.19
SO XBADJ   CSE5  -90.91 -90.97 -88.28 -22.70 -22.95 -22.50
SO YBADJ   CSE5   -0.84  -1.67  -2.46  -3.18  -3.79 -25.23
SO YBADJ   CSE5  -16.21  -4.89  -4.97  12.65  21.89  -4.32
SO YBADJ   CSE5   -3.83  -3.22  -2.51  -1.73  -0.89  -0.03
SO YBADJ   CSE5    0.84   1.67   2.46   3.18   3.79  25.23
SO YBADJ   CSE5   16.21   6.70  -3.02 -12.65 -21.89   4.32
SO YBADJ   CSE5   11.22  -3.13 -17.40   1.73   0.89   0.03


SO BUILDHGT CSE6    6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6   23.47  23.47   6.10   6.10  23.47  23.47
```

```
SO BUILDHGT CSE6      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE6     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE6     29.57  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE6     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE6     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE6     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE6     17.14  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE6     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE6     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE6     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE6     18.42  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE6    -27.88 -27.41 -26.12 -24.02 -21.20 -17.73
SO XBADJ   CSE6     41.96  46.88  -4.60  -5.84  43.31  37.75
SO XBADJ   CSE6     -8.38  -8.74  -8.84  -8.67  -8.24  -7.55
SO XBADJ   CSE6     -8.23  -8.65  -8.81  -8.71  -8.34  -7.71
SO XBADJ   CSE6    -61.37 -62.14 -61.03 -62.83 -62.72 -60.70
SO XBADJ   CSE6    -94.12 -94.81 -92.61 -27.40 -27.87 -27.50
SO YBADJ   CSE6     -1.70  -3.39  -4.96  -6.39  -7.62  -8.62
SO YBADJ   CSE6    -20.91 -11.62  -9.97  -9.83  17.19  26.14
SO YBADJ   CSE6     -7.66  -6.43  -5.01  -3.44  -1.76  -0.03
SO YBADJ   CSE6      1.70   3.39   4.96   6.39   7.62   8.62
SO YBADJ   CSE6     20.91  11.62   1.98  -7.72 -17.19 -26.14
SO YBADJ   CSE6     15.05   0.08 -14.90   3.44   1.76   0.03


SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47   6.10   6.10  23.47  23.47
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7      6.10   6.10   6.10   6.10   6.10   6.10
SO BUILDHGT CSE7     23.47  23.47  23.47  23.47  23.47  23.47
SO BUILDHGT CSE7      6.10  29.57  29.57   6.10   6.10   6.10
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  35.05  36.11  29.43  29.09
SO BUILDWID CSE7     32.73  29.54  25.44  20.58  15.09   9.14
SO BUILDWID CSE7     15.09  20.58  25.44  29.54  32.73  34.93
SO BUILDWID CSE7     29.43  28.87  27.43  28.87  29.43  29.09
SO BUILDWID CSE7     32.73  18.42  19.15  20.58  15.09   9.14
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27   9.14  15.09  19.41  22.95
SO BUILDLEN CSE7     29.54  32.73  34.93  36.07  36.11  35.05
SO BUILDLEN CSE7     36.11  36.07  34.93  32.73  29.54  25.44
SO BUILDLEN CSE7     19.41  15.27  10.67  15.27  19.41  22.95
SO BUILDLEN CSE7     29.54  17.14  15.33  36.07  36.11  35.05
SO XBADJ   CSE7    -32.81 -32.11 -30.45 -27.85 -24.41 -20.23
SO XBADJ   CSE7     40.25  46.01  -4.60  -4.97  45.02  40.25
SO XBADJ   CSE7     -5.16  -4.91  -4.51  -3.97  -3.31  -2.55
SO XBADJ   CSE7     -3.30  -3.95  -4.48  -4.88  -5.12  -5.21
SO XBADJ   CSE7    -59.66 -61.28 -61.03 -63.70 -64.43 -63.20
SO XBADJ   CSE7    -24.37 -98.64 -96.94 -32.09 -32.80 -32.50
SO YBADJ   CSE7     -2.57  -5.10  -7.46  -9.60 -11.45 -12.95
SO YBADJ   CSE7    -25.61 -16.55 -14.97 -14.75  12.49  21.81
SO YBADJ   CSE7    -11.49  -9.65  -7.51  -5.15  -2.63  -0.03
SO YBADJ   CSE7      2.57   5.10   7.46   9.60  11.45  12.95
SO YBADJ   CSE7     25.61  16.55   6.98  -2.80 -12.49 -21.81
SO YBADJ   CSE7     11.49   3.29 -12.40   5.15   2.63   0.03

  SRCGROUP MG MGA7595 MGB7595 MGC7595 FGH1
  SRCGROUP SH SHA7595 SHB7595 SHC7595 FGH1
  SRCGROUP MGC7 MGA7595 MGB7595 MGC7595 FGH1 CSE1-CSE7
  SRCGROUP SHC7 SHA7595 SHB7595 SHC7595 FGH1 CSE1-CSE7

SO FINISHED
**
**********************************
** ISCST3 Receptor Pathway
**********************************
**
**
```

```
RE STARTING
  INCLUDED RIV1COND.ROU
RE FINISHED
**
**********
** AERMOD Meteorology Pathway
**********
**
**
ME STARTING
**   SURFFILE C:\amodmet\PBIMIA01.SFC
**   PROFFILE C:\amodmet\PBIMIA01.PFL
  SURFFILE PBIMIA01.SFC
  PROFFILE PBIMIA01.PFL
  SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
  UAIRDATA 92803 2001 MIAMI/FIU
  PROFBASE 19 FEET
ME FINISHED
**
**********
** AERMOD Output Pathway
**********
**
**
OU STARTING
  RECTABLE ALLAVE FIRST SECOND
OU FINISHED
**
```

PREDICTED IMPACTS FOR THE EXISTING UNITS 3 AND 4 MODELED WITH 10 G/S EMISSION RATE

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENOIL3.O01
AERMOD OUTPUT FILE NUMBER 2 :GENOIL3.O02
AERMOD OUTPUT FILE NUMBER 3 :GENOIL3.O03
AERMOD OUTPUT FILE NUMBER 4 :GENOIL3.O04
AERMOD OUTPUT FILE NUMBER 5 :GENOIL3.O05
First title for last output file is: 2001 FPL RIVIERA REPOWERING EXISTING, stack tests, GENERIC 9/03/2008
Second title for last output file is: PALM BEACH/MIAMI METEOROLOGICAL DATA, 2001 - 2005

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: ALL					
Annual					
	2001	0.19463	593100.	2960900.	01123124
	2002	0.24349	593300.	2961300.	02123124
	2003	0.22958	593400.	2961500.	03123124
	2004	0.21689	593200.	2961100.	04123124
	2005	0.20330	593200.	2960900.	05123124
HIGH 24-Hour					
	2001	1.07923	593600.	2961700.	01060424
	2002	1.16441	593300.	2961300.	02062024
	2003	1.37159	593300.	2961400.	03061624
	2004	1.31696	593500.	2961600.	04082624
	2005	1.41964	593500.	2961600.	05070424
HSH 24-Hour					
	2001	1.01559	593100.	2960400.	01050424
	2002	1.08249	593100.	2961300.	02081524
	2003	1.24266	593600.	2961600.	03071124
	2004	1.16510	593500.	2961600.	04060224
	2005	1.13413	593300.	2961000.	05092824
HIGH 8-Hour					
	2001	2.76997	593000.	2960400.	01100916
	2002	2.77294	593600.	2961800.	02030216
	2003	2.90702	593600.	2961600.	03071116
	2004	2.80401	593100.	2960800.	04100816
	2005	2.84541	593300.	2961000.	05051416
HSH 8-Hour					
	2001	2.40209	593000.	2960400.	01120516
	2002	2.54058	593300.	2961500.	02032616
	2003	2.59144	593500.	2961600.	03071116
	2004	2.52652	593600.	2961700.	04091516
	2005	2.58523	593200.	2960800.	05111316
HIGH 3-Hour					
	2001	3.10741	593300.	2961200.	01051515
	2002	3.27850	593400.	2960400.	02073115
	2003	3.25182	593400.	2961500.	03040812
	2004	3.33163	593300.	2961200.	04051112
	2005	3.26864	593600.	2961600.	05070412
HSH 3-Hour					
	2001	3.07357	593300.	2961200.	01051815
	2002	3.12455	593300.	2961400.	02042215
	2003	3.17171	593600.	2961600.	03071112
	2004	3.16390	593200.	2960800.	04052012
	2005	3.13502	593100.	2961000.	05081815
HIGH 1-Hour					
	2001	3.49889	594700.	2958450.	01092809
	2002	5.75756	595800.	2958700.	02121609
	2003	3.46623	593400.	2961400.	03062913
	2004	3.48972	593500.	2960100.	04090212
	2005	4.21768	593100.	2958800.	05062108
HSH 1-Hour					
	2001	3.32944	593500.	2961500.	01081613
	2002	3.49482	593600.	2961700.	02050212
	2003	3.42894	593300.	2961200.	03050813
	2004	3.44711	593200.	2961000.	04091212
	2005	3.43455	595200.	2960700.	05052414

All receptor computations reported with respect to a user-specified origin
GRID 0.00 0.00
DISCRETE 0.00 0.00

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GENOIL3C.O01
AERMOD OUTPUT FILE NUMBER 2 :GENOIL3C.O02
AERMOD OUTPUT FILE NUMBER 3 :GENOIL3C.O03
AERMOD OUTPUT FILE NUMBER 4 :GENOIL3C.O04
AERMOD OUTPUT FILE NUMBER 5 :GENOIL3C.O05
First title for last output file is: 2001 FPL RIVIERA EXISTING, stack tests, GENERIC CONDO 10/02/2008
Second title for last output file is: PALM BEACH/MIAMI METEOROLOGICAL DATA, 2001 - 2005

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: ALL					
Annual					
	2001	0.10141	594280.	2960240.	01123124
	2002	0.15232	594280.	2960240.	02123124
	2003	0.15685	594280.	2960240.	03123124
	2004	0.13620	594330.	2960240.	04123124
	2005	0.17849	594280.	2960240.	05123124
HIGH 24-Hour					
	2001	1.73817	594330.	2960240.	01041824
	2002	2.32055	594280.	2960240.	02052124
	2003	2.57472	594280.	2960240.	03112924
	2004	2.20418	594330.	2960240.	04090424
	2005	2.41399	594280.	2960240.	05041524
HSH 24-Hour					
	2001	1.63121	594305.	2960240.	01102724
	2002	2.15563	594330.	2960240.	02111324
	2003	2.08139	594280.	2960240.	03101924
	2004	1.98231	594330.	2960240.	04122724
	2005	2.35782	594280.	2960240.	05011824
HIGH 8-Hour					
	2001	4.59437	594280.	2960240.	01102716
	2002	5.46262	594330.	2960240.	02052116
	2003	6.70871	594280.	2960240.	03112916
	2004	5.58653	594330.	2960240.	04021816
	2005	5.92863	594280.	2960240.	05011816
HSH 8-Hour					
	2001	4.20991	594330.	2960240.	01041816
	2002	4.81997	594280.	2960240.	02110716
	2003	4.44254	594280.	2960240.	03100216
	2004	5.42635	594330.	2960240.	04122716
	2005	5.15192	594305.	2960240.	05011816
HIGH 3-Hour					
	2001	7.31994	594330.	2960240.	01041812
	2002	7.09735	594280.	2960240.	02040518
	2003	8.85949	594280.	2960240.	03112915
	2004	9.01184	594330.	2960240.	04090409
	2005	8.46373	594330.	2960240.	05011715
HSH 3-Hour					
	2001	5.96899	594330.	2960240.	01102712
	2002	6.24308	594280.	2960240.	02112615
	2003	6.62987	594280.	2960240.	03112015
	2004	8.82049	594330.	2960240.	04021815
	2005	7.44072	594280.	2960240.	05040312
HIGH 1-Hour					
	2001	10.07296	594280.	2960240.	01102713
	2002	9.27051	594280.	2960240.	02110211
	2003	11.21571	594280.	2960240.	03112912
	2004	14.72329	594280.	2960240.	04090408
	2005	11.20737	594280.	2960240.	05012312
HSH 1-Hour					
	2001	9.85078	594280.	2960240.	01102712
	2002	9.15075	594330.	2960240.	02052116
	2003	10.59082	594280.	2960240.	03112915
	2004	11.01266	594330.	2960240.	04121514
	2005	10.34539	594280.	2960240.	05041617

All receptor computations reported with respect to a user-specified origin
GRID 0.00 0.00
DISCRETE 0.00 0.00

```
CO STARTING
   TITLEONE 2001 FPL RIVIERA REPOWERING EXISTING, stack tests, GENERIC 9/03/2008
   TITLETWO PALM BEACH/MIAMI METEOROLOGICAL DATA, 2001 - 2005
   MODELOPT DFAULT CONC NOWARN
   AVERTIME PERIOD 24 8 3 1
   POLLUTID GENERIC
   RUNORNOT RUN
CO FINISHED
**
**********************************
** AERMOD Source Pathway
**********************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION UN3 POINT 594240.000 2960800.000 3.35
   LOCATION UN4 POINT 594186.350 2960800.000 3.35
** Source Parameters **
**   SRCPARAM UN3 5.0 90.83 401.48 26.85 4.88
**   SRCPARAM UN4 5.0 90.83 401.48 26.85 4.88

   SRCPARAM UN3 5.0 90.83 417.2  28.1  4.88
   SRCPARAM UN4 5.0 90.83 417.2  28.1  4.88

SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN3        41.76   41.76    0.00    0.00   41.76   41.76
SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN3        41.76    0.00    0.00    0.00   41.76   41.76
SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDWID UN3        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN3        18.91   15.48    0.00    0.00   18.91   21.77
SO BUILDWID UN3        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDWID UN3        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN3        18.91    0.00    0.00    0.00   18.91   21.77
SO BUILDWID UN3        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDLEN UN3        15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN3        26.02   25.12    0.00    0.00   26.02   26.12
SO BUILDLEN UN3        25.42   23.96   21.77   18.91   15.48   11.58
SO BUILDLEN UN3        15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN3        26.02    0.00    0.00    0.00   26.02   26.12
SO BUILDLEN UN3        25.42   23.96   21.77   18.91   15.48   11.58
SO XBADJ    UN3       -26.95  -27.78  -27.76  -26.90  -66.29  -69.20
SO XBADJ    UN3       -70.02  -68.70    0.00    0.00   -6.30   -3.27
SO XBADJ    UN3        -0.14    2.99    6.03    8.89   11.48   13.72
SO XBADJ    UN3        11.47    8.87    6.00    2.94   40.86   43.08
SO XBADJ    UN3        -6.37    0.00    0.00    0.00  -19.71  -22.84
SO XBADJ    UN3       -25.28  -26.95  -27.80  -27.80  -26.96  -25.30
SO YBADJ    UN3        -3.42   -6.71   -9.78  -12.57   19.49    9.89
SO YBADJ    UN3        -0.01   -9.91    0.00    0.00  -18.32  -16.88
SO YBADJ    UN3       -14.92  -12.51   -9.72   -6.64   -3.35    0.04
SO YBADJ    UN3         3.42    6.71    9.78   12.57  -19.49   -9.89
SO YBADJ    UN3        18.34    0.00    0.00    0.00   18.32   16.88
SO YBADJ    UN3        14.92   12.51    9.72    6.64    3.35   -0.04


SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN4        41.76    0.00    0.00    0.00   41.76   41.76
SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN4        41.76    0.00    0.00   41.76   41.76   41.76
SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDWID UN4        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN4        18.91    0.00    0.00    0.00   18.91   21.77
SO BUILDWID UN4        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDWID UN4        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN4        18.91    0.00    0.00   15.48   18.91   21.77
SO BUILDWID UN4        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDLEN UN4        15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN4        26.02    0.00    0.00    0.00   26.02   26.12
SO BUILDLEN UN4        25.42   23.96   21.77   18.91   15.48   11.58
```

```
SO BUILDLEN UN4         15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN4         26.02    0.00    0.00   25.12   26.02   26.12
SO BUILDLEN UN4         25.42   23.96   21.77   18.91   15.48   11.58
SO XBADJ    UN4        -26.94  -27.76  -27.74  -26.87  -25.19  -22.74
SO XBADJ    UN4        -19.60    0.00    0.00    0.00   -6.26   -3.23
SO XBADJ    UN4         -0.11    3.02    6.06    8.91   11.49   13.72
SO XBADJ    UN4         11.46    8.85    5.97    2.91   -0.24   -3.38
SO XBADJ    UN4         -6.42    0.00    0.00  -68.82  -19.76  -22.89
SO XBADJ    UN4        -25.32  -26.98  -27.82  -27.82  -26.97  -25.30
SO YBADJ    UN4         -3.47   -6.75   -9.83  -12.61  -15.00  -16.94
SO YBADJ    UN4        -18.36    0.00    0.00    0.00  -18.30  -16.85
SO YBADJ    UN4        -14.89  -12.48   -9.68   -6.59   -3.30    0.09
SO YBADJ    UN4          3.47    6.75    9.83   12.61   15.00   16.94
SO YBADJ    UN4         18.36    0.00    0.00    9.89   18.30   16.85
SO YBADJ    UN4         14.89   12.48    9.68    6.59    3.30   -0.09

   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED RIVEXist.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE C:\amodmet\PBIMIA01.SFC
   PROFFILE C:\amodmet\PBIMIA01.PFL
   SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
   UAIRDATA 92803 2001 MIAMI/FIU
   PROFBASE 19 FEET
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE FIRST SECOND
OU FINISHED
```

```
CO STARTING
   TITLEONE 2001 FPL RIVIERA EXISTING, stack tests, GENERIC CONDO 10/02/2008
   TITLETWO PALM BEACH/MIAMI METEOROLOGICAL DATA, 2001 - 2005
   MODELOPT DFAULT CONC NOWARN
   AVERTIME PERIOD 24 8 3 1
   POLLUTID GENERIC
   RUNORNOT RUN
   FLAGPOLE
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION UN3 POINT 594240.000 2960800.000 3.35
   LOCATION UN4 POINT 594186.350 2960800.000 3.35
** Source Parameters **
**   SRCPARAM UN3 5.0 90.83 401.48 26.85 4.88
**   SRCPARAM UN4 5.0 90.83 401.48 26.85 4.88

   SRCPARAM UN3 5.0 90.83 417.2  28.1  4.88
   SRCPARAM UN4 5.0 90.83 417.2  28.1  4.88

SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN3        41.76   41.76    0.00    0.00   41.76   41.76
SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN3        41.76    0.00    0.00    0.00   41.76   41.76
SO BUILDHGT UN3        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDWID UN3        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN3        18.91   15.48    0.00    0.00   18.91   21.77
SO BUILDWID UN3        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDWID UN3        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN3        18.91    0.00    0.00    0.00   18.91   21.77
SO BUILDWID UN3        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDLEN UN3        15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN3        26.02   25.12    0.00    0.00   26.02   26.12
SO BUILDLEN UN3        25.42   23.96   21.77   18.91   15.48   11.58
SO BUILDLEN UN3        15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN3        26.02    0.00    0.00    0.00   26.02   26.12
SO BUILDLEN UN3        25.42   23.96   21.77   18.91   15.48   11.58
SO XBADJ    UN3       -26.95  -27.78  -27.76  -26.90  -66.29  -69.20
SO XBADJ    UN3       -70.02  -68.70    0.00    0.00   -6.30   -3.27
SO XBADJ    UN3        -0.14    2.99    6.03    8.89   11.48   13.72
SO XBADJ    UN3        11.47    8.87    6.00    2.94   40.86   43.08
SO XBADJ    UN3        -6.37    0.00    0.00    0.00  -19.71  -22.84
SO XBADJ    UN3       -25.28  -26.95  -27.80  -27.80  -26.96  -25.30
SO YBADJ    UN3        -3.42   -6.71   -9.78  -12.57   19.49    9.89
SO YBADJ    UN3        -0.01   -9.91    0.00    0.00  -18.32  -16.88
SO YBADJ    UN3       -14.92  -12.51   -9.72   -6.64   -3.35    0.04
SO YBADJ    UN3         3.42    6.71    9.78   12.57  -19.49   -9.89
SO YBADJ    UN3        18.34    0.00    0.00    0.00   18.32   16.88
SO YBADJ    UN3        14.92   12.51    9.72    6.64    3.35   -0.04


SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN4        41.76    0.00    0.00    0.00   41.76   41.76
SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDHGT UN4        41.76    0.00    0.00   41.76   41.76   41.76
SO BUILDHGT UN4        41.76   41.76   41.76   41.76   41.76   41.76
SO BUILDWID UN4        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN4        18.91    0.00    0.00    0.00   18.91   21.77
SO BUILDWID UN4        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDWID UN4        25.12   26.02   26.12   25.42   23.96   21.77
SO BUILDWID UN4        18.91    0.00    0.00   15.48   18.91   21.77
SO BUILDWID UN4        23.96   25.42   26.12   26.02   25.12   23.47
SO BUILDLEN UN4        15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN4        26.02    0.00    0.00    0.00   26.02   26.12
```

```
SO BUILDLEN UN4         25.42   23.96   21.77   18.91   15.48   11.58
SO BUILDLEN UN4         15.48   18.91   21.77   23.96   25.42   26.12
SO BUILDLEN UN4         26.02    0.00    0.00   25.12   26.02   26.12
SO BUILDLEN UN4         25.42   23.96   21.77   18.91   15.48   11.58
SO XBADJ    UN4        -26.94  -27.76  -27.74  -26.87  -25.19  -22.74
SO XBADJ    UN4        -19.60    0.00    0.00    0.00   -6.26   -3.23
SO XBADJ    UN4         -0.11    3.02    6.06    8.91   11.49   13.72
SO XBADJ    UN4         11.46    8.85    5.97    2.91   -0.24   -3.38
SO XBADJ    UN4         -6.42    0.00    0.00  -68.82  -19.76  -22.89
SO XBADJ    UN4        -25.32  -26.98  -27.82  -27.82  -26.97  -25.30
SO YBADJ    UN4         -3.47   -6.75   -9.83  -12.61  -15.00  -16.94
SO YBADJ    UN4        -18.36    0.00    0.00    0.00  -18.30  -16.85
SO YBADJ    UN4        -14.89  -12.48   -9.68   -6.59   -3.30    0.09
SO YBADJ    UN4          3.47    6.75    9.83   12.61   15.00   16.94
SO YBADJ    UN4         18.36    0.00    0.00    9.89   18.30   16.85
SO YBADJ    UN4         14.89   12.48    9.68    6.59    3.30   -0.09

   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED RIV1COND.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE C:\amodmet\PBIMIA01.SFC
   PROFFILE C:\amodmet\PBIMIA01.PFL
   SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
   UAIRDATA 92803 2001 MIAMI/FIU
   PROFBASE 19 FEET
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE FIRST SECOND
OU FINISHED
```

PREDICTED IMPACTS FOR THE AUXILIARY BOILER MODELED WITH 10 G/S EMISSION RATE

1. SUMMARY FILE
2. EXAMPLE INPUT FILE

AERBOB RELEASE 020304
AERMOD OUTPUT FILE NUMBER 1 :GNAUXBLR.O01
AERMOD OUTPUT FILE NUMBER 2 :GNAUXBLR.O02
AERMOD OUTPUT FILE NUMBER 3 :GNAUXBLR.O03
AERMOD OUTPUT FILE NUMBER 4 :GNAUXBLR.O04
AERMOD OUTPUT FILE NUMBER 5 :GNAUXBLR.O05
First title for last output file is: 2001 FPL RBEC AUX BOILER 12/31/08
Second title for last output file is: GENERIC (10 g/s) EMISSION RATE

AVERAGING TIME	YEAR	CONC (ug/m3)	X (m)	Y (m)	PERIOD ENDING (YYMMDDHH)
SOURCE GROUP ID: ALL					
Annual					
	2001	30.06243	593995.	2960841.	01123124
	2002	33.25114	594037.	2960840.	02123124
	2003	26.23538	594037.	2960840.	03123124
	2004	31.51813	594037.	2960840.	04123124
	2005	27.00746	593952.	2960802.	05123124
HIGH 24-Hour					
	2001	224.63690	594325.	2960573.	01122624
	2002	220.11000	594037.	2960840.	02013024
	2003	211.95465	593951.	2960762.	03111624
	2004	247.11748	594080.	2960838.	04091424
	2005	231.06708	594037.	2960840.	05060924
HIGH 8-Hour					
	2001	316.37122	593952.	2960802.	01101208
	2002	350.50696	594325.	2960573.	02112708
	2003	332.66202	594325.	2960573.	03010608
	2004	291.80511	594037.	2960840.	04091408
	2005	356.38397	594325.	2960573.	05120308
HIGH 3-Hour					
	2001	454.41177	593800.	2960900.	01083006
	2002	434.90198	593800.	2960900.	02102621
	2003	448.47083	594325.	2960573.	03101903
	2004	409.48892	594300.	2960500.	04110721
	2005	408.67203	594325.	2960573.	05102906
HIGH 1-Hour					
	2001	566.27161	593800.	2960800.	01081820
	2002	550.58459	593800.	2960900.	02070803
	2003	575.60150	593800.	2960800.	03090205
	2004	559.52777	593800.	2960900.	04062801
	2005	586.39111	593800.	2960900.	05080122

All receptor computations reported with respect to a user-specified origin
GRID 0.00 0.00
DISCRETE 0.00 0.00

```
CO STARTING
   TITLEONE 2001 FPL RBEC AUX BOILER  12/31/08
   TITLETWO GENERIC (10 g/s) EMISSION RATE
   MODELOPT DFAULT CONC NOWARN
   AVERTIME PERIOD 24 8 3 1
   POLLUTID GEN
   RUNORNOT RUN
CO FINISHED
**
**************************************
** ISCST3 Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION AUXBLR POINT 594222.920 2960769.070 1.000

** Source Parameters **
   SRCPARAM AUXBLR 10.0 18.3 419.87 25.1 0.838

** Building Downwash **
SO BUILDHGT AUXBLR     23.17   23.17   29.57   23.17   29.57   23.47
SO BUILDHGT AUXBLR     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT AUXBLR     23.47   23.17   23.17   23.17   23.17   23.17
SO BUILDHGT AUXBLR     23.17   23.17   23.17   23.17    0.00   23.47
SO BUILDHGT AUXBLR     23.47   23.47   23.47   23.47   23.47   23.47
SO BUILDHGT AUXBLR     23.47   23.17   29.57   23.17   23.17   23.17
SO BUILDWID AUXBLR     20.73   27.91   19.15   39.53   17.13   29.09
SO BUILDWID AUXBLR     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID AUXBLR     27.87   39.53   34.24   27.91   20.73   12.92
SO BUILDWID AUXBLR     20.73   27.91   34.24   39.53    0.00   29.09
SO BUILDWID AUXBLR     29.43   28.87   27.43   28.87   29.43   29.09
SO BUILDWID AUXBLR     27.87   39.53   19.15   27.91   20.73   12.92
SO BUILDLEN AUXBLR     47.64   47.73   15.33   43.61   18.42   22.95
SO BUILDLEN AUXBLR     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN AUXBLR     25.81   43.61   46.38   47.73   47.64   46.09
SO BUILDLEN AUXBLR     47.64   47.73   46.38   43.61    0.00   22.95
SO BUILDLEN AUXBLR     19.41   15.27   10.67   15.27   19.41   22.95
SO BUILDLEN AUXBLR     25.81   43.61   15.33   47.73   47.64   46.09
SO XBADJ    AUXBLR    -66.87  -64.94  -80.56  -55.26  -83.51   37.84
SO XBADJ    AUXBLR    -54.21 -101.15 -101.95 -104.43 -103.73  -60.07
SO XBADJ    AUXBLR    -57.75   11.74   14.72   17.25   19.26   20.69
SO XBADJ    AUXBLR     19.24   17.21   14.65   11.65    0.00  -60.79
SO XBADJ    AUXBLR     34.81   40.73   45.42   43.96   41.16   37.12
SO XBADJ    AUXBLR     31.95  -55.35  -80.63  -64.98  -66.90  -66.78
SO YBADJ    AUXBLR     -7.66  -15.02   16.97  -28.16   -8.99  -17.58
SO YBADJ    AUXBLR     26.09   26.08    9.45   -7.47  -24.17  -17.33
SO YBADJ    AUXBLR    -25.50  -28.06  -21.81  -14.89   -7.53    0.07
SO YBADJ    AUXBLR      7.66   15.02   21.93   28.16    0.00   17.58
SO YBADJ    AUXBLR    -26.09  -17.96   -9.29   -0.34    8.62   17.33
SO YBADJ    AUXBLR     25.50   28.06  -17.03   14.89    7.53   -0.07

   SRCGROUP ALL

SO FINISHED
**
**************************************
** ISCST3 Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED RIVFHCS.ROU
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE C:\amodmet\PBIMIA01.SFC
```

```
   PROFFILE C:\amodmet\PBIMIA01.PFL
   SURFDATA 12844 2001 WEST_PALM_BEACH/INT'L_ARPT
   UAIRDATA 92803 2001 MIAMI/FIU
   PROFBASE 19 FEET
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE FIRST
OU FINISHED
**
```