F.J. GANNON STATION
UNITS 5 AND 6
STACK HEIGHT INCREASE
CONSTRUCTION PERMIT APPLICATION

Prepared for:

TECO
TAMPA ELECTRIC

Prepared by:

ECT
Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 98873-0100

October 1998

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TABLE OF CONTENTS

INTRODUCTION

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The Tampa Electric Company (TEC) Francis J. Gannon Station located in Tampa, Hillsborough County, Florida is a nominal 1,317 megawatt (MW) electric generation facility. The F.J. Gannon Station consists of six steam boilers (Unit Nos. 1 through 6), six steam turbines, one simple-cycle combustion turbine (CT No. 1), a once-through cooling water system, solid fuels, fluxing material, fly ash, and slag storage and handling facilities, fuel oil storage tank, and ancillary support equipment.

TEC submitted a Title V permit application for the F.J. Gannon Station in June 1996. In its review of the Title permit application, the Florida Department of Environmental Protection (FDEP) expressed concern with potential exceedances of sulfur dioxide (SO_2) ambient air quality standards (AAQS).

In response to the Department's concern, TEC proposes to increase the stack height of F.J. Gannon Station Unit No. 5 and Unit No. 6 from their current height of 315 feet (96 meters) to 361 feet (110 meters) and to implement a new, *additional* 24-hour average SO_2 limit for F.J. Gannon Station Units 1 through 6. No revisions to any existing F.J. Gannon Station emission limitations are requested.

A completed FDEP Application for Air Permit – Long Form follows this introduction. This application only addresses the proposed increase in stack height for Unit No. 5 and Unit No. 6 and the new, additional 24-hour average SO_2 limit for F.J. Gannon Station Units 1 through 6. As previously mentioned, TEC is not requesting revisions to any existing F.J. Gannon Station emission limitation. Attachments A and B provide the F.J. Gannon Station Sulfur Dioxide Regulatory Compliance Plan and stack drawings, respectively.

APPLICATION

FLORIDA DEP LOGO

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: **Tampa Electric Company**	
2. Site Name: **F.J. Gannon Station**	
3. Facility Identification Number: **0570040**	[ ] Unknown
4. Facility Location: Street Address or Other Locator: **Port Sutton Road** City: **Tampa** County: **Hillsborough** Zip Code: **33619**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Processing Information (DEP Use)

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Gregory M. Nelson, P.E.
   Manager – Environmental Planning

2. Owner/Authorized Representative or Responsible Official Mailing Address:

   Organization/Firm: **Tampa Electric Company**
   Street Address: **6944 U.S. Highway 41 North**
   City: **Apollo Beach** State: **FL** Zip Code: **33572-9200**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: **(813) 641-5016** Fax: **(813) 641-5081**

4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.*

Signature Gregory M. Nelson Date 10/29/98

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID	Description of Emissions Unit	Permit Type
005	Unit No. 5 – Solid Fuel-Fired Steam Generator	AC1E
006	Unit No. 6 – Solid Fuel-Fired Steam Generator	AC1E

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit to be revised: _____

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s):

_____

[ ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain:

[X] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: **AO29-203511, AO29-203512**

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): _____

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one:

[X] Attached - Amount: $ 250 [ ] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

As part of its review of the F.J. Gannon Station Title V permit application, the Florida Department of Environmental Protection (FDEP) expressed concern with potential exceedances of ambient air quality standards (AAQS) for sulfur dioxide (SO_2). In response to this concern, Tampa Electric Company (TEC) proposes to increase the stack height of Unit No. 5 and Unit No. 6 from 315 ft (96 meters) to 361 ft (110 meters) and implement a new, additional 24-hour average SO_2 emission limit for the F.J. Gannon Station.

A dispersion modeling assessment of ambient SO_2 impacts due to F.J. Gannon Station operations was submitted to the Department on October 15, 1998. This assessment provides reasonable assurance that the stack height increase, together with the additional daily limit on F.J. Gannon Station SO_2 emissions, will result in ambient impacts that are below the applicable SO_2 AAQS. No revisions to existing F.J. Gannon Station SO_2 emission limitations are requested. TEC's SO_2 compliance plan for the F.J. Gannon Station is provided in Attachment A of this permit application.

Pursuant to guidance received from FDEP, TEC also requests permit revisions to Unit No. 1 through No. 6 to allow for the combustion of up to 48 gallon per minute of used oil, including liquid oil and oil-contaminated solids, in each unit.

2. Projected or Actual Date of Commencement of Construction:
   Unit 5 – 3rd Quarter 1999, Unit 6 – 3rd Quarter 2000

3. Projected Date of Completion of Construction:
   Unit 5 – 1/1/2000, Unit 6 – 1/1/2001

Professional Engineer Certification

1. Professional Engineer Name: **Thomas W. Davis**
   Registration Number: **36777**

2. Professional Engineer Mailing Address:

   Organization/Firm: **Environmental Consulting & Technology, Inc.**
   Street Address: **3701 NW 98th Street**
   City: **Gainesville** State: **FL** Zip Code: **32606**

3. Professional Engineer Telephone Numbers:
   Telephone: **(352) 332-0444** Fax: **(352) 332-6722**

4. 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.

If the purpose of this application is to obtain a Title V source 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [X] 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 (seal) Date: 10/28/98

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact:

   Theresa J.L. Watley
   Consulting Engineer

2. Application Contact Mailing Address:

   Organization/Firm: **Tampa Electric Company**
   Street Address: **6944 U.S. Highway 41 North**
   City: **Apollo Beach** State: **FL** Zip Code: **33572-5081**

3. Application Contact Telephone Numbers:
   Telephone: **(813) 641-5034** Fax: **(813) 641-5081**

Application Comment

This application addresses only the stack height increase proposed for Unit No. 5 and Unit No. 6 and a new, additional daily average SO_2 emission limitation for the F.J. Gannon Station. No revisions to any existing F.J. Gannon Station emission limitations are requested.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **17** East (km): **360.00** North (km): **3087.50**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): Longitude (DD/MM/SS):			
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 (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: **Cindy Barringer, Environmental Coordinator**
2. Facility Contact Mailing Address: Organization/Firm: **Tampa Electric Company** Street Address: **Port Sutton Road** City: **Tampa** State: **FL** Zip Code: **33619**
3. Facility Contact Telephone Numbers: Telephone: **(813) 641-5497** Fax: **(813) 641-5566**

Facility Regulatory Classifications

1. Small Business Stationary Source? [ ] Yes [X] No [ ] Unknown
2. Title V Source? [X] Yes [ ] No
3. Synthetic Non-Title V Source? [ ] Yes [X] No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? [X] Yes [ ] No
5. Synthetic Minor Source of Pollutants Other than HAPs? [ ] Yes [X] No
6. Major Source of Hazardous Air Pollutants (HAPs)? [X] Yes [ ] No
7. Synthetic Minor Source of HAPs? [ ] Yes [X] No
8. One or More Emissions Units Subject to NSPS? [ ] Yes [X] No
9. One or More Emission Units Subject to NESHAP? [ ] Yes [X] No
10. Title V Source by EPA Designation? [ ] Yes [X] No
11. Facility Regulatory Classifications Comment (limit to 200 characters): **NA**

B. FACILITY REGULATIONS

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

Not applicable

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

A complete list of all federal and state applicable requirements was previously submitted with the initial F.J. Gannon Station Title V permit application.	

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
Provided with initial F.J. Gannon Station Title V permit application.	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant __1__ of __2__

1. Pollutant Emitted: **Sulfur Dioxide**		
2. Requested Emissions Cap:	**10.6** (ton/hour)	**N/A** (tons/year)
3. Basis for Emissions Cap Code: **FDEP Rule 62-296.405(1)(c)2.a., F.A.C.**		
4. Facility Pollutant Comment (limit to 400 characters): **Hourly sulfur dioxide emission rate cap (Field 2) represents total sulfur dioxide emissions from F.J. Gannon Station Unit No. 1 through Unit No. 6 on a *weekly* average basis. This is an existing requirement per FDEP Rule 62-296.405(1)(c)2.a., F.A.C.**		

Facility Pollutant Detail Information: Pollutant __2__ of __2__

1. Pollutant Emitted: **Sulfur Dioxide**		
2. Requested Emissions Cap:	**276** (tons/day)	**N/A** (tons/year)
3. Basis for Emissions Cap Code: **Ambient**		
4. Facility Pollutant Comment (limit to 400 characters): **Daily sulfur dioxide emission rate cap (Field 2) represents total sulfur dioxide emissions from F.J. Gannon Station Unit No. 1 through Unit No. 6 on a 24-hour block average basis. This is a proposed new, *additional* emission limitation requested for the purpose of providing reasonable assurance to the FDEP that the F.J. Gannon Station will not cause nor contribute to any exceedance of the SO_2 AAQS. No change to existing F.J. Gannon Station emission limits are requested.**		

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location: [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
2. Facility Plot Plan: [**X**] Attached, Document ID:_____ [ ] Not Applicable [ ] Waiver Requested **Stack drawings are provided in Attachment B.**
3. Process Flow Diagram(s): [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only – N/A

7. List of Proposed Exempt Activities: [ ] Attached, Document ID:_____ [ ] Not Applicable
8. List of Equipment/Activities Regulated under Title VI: [ ] Attached, Document ID:_____ [ ] Equipment/Activities On site but Not Required to be Individually Listed [ ] Not Applicable
9. Alternative Methods of Operation: [ ] Attached, Document ID:_____ [ ] Not Applicable
10. Alternative Modes of Operation (Emissions Trading): [ ] Attached, Document ID:_____ [ ] Not Applicable

11. Identification of Additional Applicable Requirements: [ ] Attached, Document ID:_____ [ ] Not Applicable
12. Compliance Assurance Monitoring Plan: [ ] Attached, Document ID:_____ [ ] Not Applicable
13. Risk Management Plan Verification: [ ] Plan Submitted to Implementing Agency - Verification Attached, Document ID:_____ [ ] Plan to be Submitted to Implementing Agency by Required Date [ ] Not Applicable
14. Compliance Report and Plan: [ ] Attached, Document ID:_____ [ ] Not Applicable
15. Compliance Certification (Hard-copy Required): [ ] Attached, Document ID:_____ [ ] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[X] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Unit No. 5, Solid Fuel Steam Generator**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **005**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [X] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **N/A**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Electrostatic precipitator system.**
2. Control Device or Method Code: **10**

B.

1. Description (limit to 200 characters): **N/A**
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters): **N/A**
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: **N/A**			
2. Long-term Reserve Shutdown Date: **N/A**			
3. Package Unit: **N/A** Manufacturer:		Model Number:	
4. Generator Nameplate Rating:	**239**	MW	
5. Incinerator Information: **N/A** Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:			°F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		**2,284**	mmBtu/hr
2. Maximum Incineration Rate: **N/A**	lb/hr		tons/day
3. Maximum Process or Throughput Rate: **N/A**			
4. Maximum Production Rate: **N/A**			
5. Operating Capacity Comment (limit to 200 characters): **Maximum heat input rate of 2,284 MMBtu/hr is on a monthly average basis.**			

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

N/A

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

A complete list of all federal and state applicable requirements was previously submitted with the initial F.J. Gannon Station Title V permit application.	

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **CS-005**	
2. Emission Point Type Code: [X] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Unit No. 5 – Solid Fuel-Fired Steam Generator**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [X] V [ ] W	
6. Stack Height:	**361** feet
7. Exit Diameter:	**10.3** feet
8. Exit Temperature:	**293.4** °F

9. Actual Volumetric Flow Rate:	**837,100**	acfm
10. Percent Water Vapor :	**N/A**	%
11. Maximum Dry Standard Flow Rate:	**N/A**	dscfm
12. Nonstack Emission Point Height:	**N/A**	feet

13. Emission Point UTM Coordinates:
Zone: East (km): North (km):

14. Emission Point Comment (limit to 200 characters):

Stack exit temperature (Field 8) and exhaust flow rate (Field 9) are based on continuous emissions monitoring system (CEMS) data.

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Process/fuel information for Unit No. 5 was previously provided in the initial F.J. Gannon Station Title V permit application. This construction permit application does not request any changes in the process/fuel data previously provided.**	
2. Source Classification Code (SCC):	
3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

Emissions Unit Information Section 1 of 2

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **N/A**	
2. Source Classification Code (SCC):	
3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
Provided with initial F.J. Gannon Station Title V permit application.			

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: **Sulfur Dioxide**		
2. Total Percent Efficiency of Control:		**N/A** %
3. Potential Emissions:	**5,481.60** lb/hour	**24,009.40** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No		
5. Range of Estimated Fugitive/Other Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3	_____ to _____	tons/year
6. Emission Factor: **2.40 lb/MMBtu** Reference: **Allowable Emission Rate**		
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **Potential emissions set equal to allowable emissions.**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **Rule** 2.
3. Future Effective Date of Allowable Emissions: **N/A** 4.
3. Requested Allowable Emissions and Units: **2.40 lb/MMBtu**
4. Equivalent Allowable Emissions: **5,481.60 lb/hour** **24,009.40 tons/year**
5. Method of Compliance (limit to 60 characters): **Continuous emissions monitoring system (CEMS)**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested allowable emissions (Field 3) is on a weekly average basis, per Specific Condition No. 4 of FDEP Operation Permit AO29-203511 and FDEP Rule 62-296.405(1)(c)2.a., F.A.C.** **Equivalent allowable emissions (Field 4) represents total *maximum* emissions for Unit No. 1 through Unit No. 6 on an hourly (weekly average) and annual average basis.**

B.

1. Basis for Allowable Emissions Code: **Rule** 2.
2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **10.60 tons/hour**
4. Equivalent Allowable Emissions: **1,780.8 tons/week** **92,856.0 tons/year**
5. Method of Compliance (limit to 60 characters): **Continuous emissions monitoring system (CEMS)**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested allowable emissions (Field 3) represents total hourly emissions for Unit No. 1 through Unit No. 6 on a weekly average basis, per Specific Condition No. 4 of FDEP Operation Permit AO29-203511 and FDEP Rule 62-296.405(1)(c)(2.a., F.A.C.** **Equivalent allowable emissions (Field 4) represents total *maximum* emissions for Unit No. 1 through Unit No. 6 on a weekly and annual average basis.**

Allowable Emissions (Pollutant identified on front of page)

C.

1. Basis for Allowable Emissions Code: **Ambient**
2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **276.0 tons/day**
4. Equivalent Allowable Emissions: **276.0 tons/day** **N/A tons/year**
5. Method of Compliance (limit to 60 characters): **Continuous emissions monitoring system (CEMS)**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested allowable emissions (Fields 3 and 4) represents total *maximum* emissions for Unit No. 1 through Unit No. 6 on a daily (24-hour block) average basis. On a weekly average basis, daily SO_2 emissions will be lower consistent with the existing 1,780.8 tons/week cap for Unit No. 1 through Unit No. 6.**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity: [ ] Rule [ ] Other	
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	% min/hour
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **Visible emission information for Unit No. 5 was previously provided in the initial F.J. Gannon Station Title V permit application. This construction permit application does not request any change in visible emission limitations.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity: [ ] Rule [ ] Other	
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	% min/hour
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

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 (limit to 200 characters): **Continuous monitoring system information for Unit No. 5 was previously provided in the initial F.J. Gannon Station Title V permit application. This construction permit application does not request any change to the continuous monitoring systems.**	

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 (limit to 200 characters):	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[X] Unknown
SO2	[ ] C	[ ] E	[X] Unknown
NO2	[ ] C	[ ] E	[X] Unknown

4. Baseline Emissions:		
PM	lb/hour	tons/year
SO2	lb/hour	tons/year
NO2		tons/year

5. PSD Comment (limit to 200 characters):

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [**X**] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [**X**] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only N/A

10. Alternative Methods of Operation [ ] Attached, Document ID:_____ [ ] Not Applicable
11. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:_____ [ ] Not Applicable
12. Identification of Additional Applicable Requirements [ ] Attached, Document ID:_____ [ ] Not Applicable
13. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:_____ [ ] Not Applicable
14. Acid Rain Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:_____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:_____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:_____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:_____ [ ] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[**X**] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[**X**] 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.

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Unit No. 6, Solid Fuel Steam Generator**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown **006**		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [X] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **N/A**		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): **Electrostatic precipitator system.**
2. Control Device or Method Code: **10**

B.

1. Description (limit to 200 characters): **N/A**
2. Control Device or Method Code:

C.

1. Description (limit to 200 characters): **N/A**
2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: **N/A**			
2. Long-term Reserve Shutdown Date: **N/A**			
3. Package Unit: **N/A** Manufacturer:		Model Number:	
4. Generator Nameplate Rating:	**446**	MW	
5. Incinerator Information: **N/A** Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:			°F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		**3,798**	mmBtu/hr
2. Maximum Incineration Rate: **N/A**	lb/hr		tons/day
3. Maximum Process or Throughput Rate: **N/A**			
4. Maximum Production Rate: **N/A**			
5. Operating Capacity Comment (limit to 200 characters): **Maximum heat input rate of 3,798 MMBtu/hr is on a monthly average basis.**			

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

N/A

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

A complete list of all federal and state applicable requirements was previously submitted with the initial F.J. Gannon Station Title V permit application.	

E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **CS-006**	
2. Emission Point Type Code: [X] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Unit No. 6 – Solid Fuel-Fired Steam Generator**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [X] V [ ] W	
6. Stack Height:	**361** feet
7. Exit Diameter:	**17.46** feet
8. Exit Temperature:	**260.0** °F

9. Actual Volumetric Flow Rate:	**1,568,400**	acfm
10. Percent Water Vapor :	**N/A**	%
11. Maximum Dry Standard Flow Rate:	**N/A**	dscfm
12. Nonstack Emission Point Height:	**N/A**	feet

13. Emission Point UTM Coordinates:
Zone: East (km): North (km):

14. Emission Point Comment (limit to 200 characters):

Stack exit temperature (Field 8) and exhaust flow rate (Field 9) are based on continuous emissions monitoring system (CEMS) data.

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Process/fuel information for Unit No. 6 was previously provided in the initial F.J. Gannon Station Title V permit application. This construction permit application does not request any changes in the process/fuel data previously provided.**	
2. Source Classification Code (SCC):	
3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

Emissions Unit Information Section 2 **of** 2

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **N/A**	
2. Source Classification Code (SCC):	
3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
Provided with initial F.J. Gannon Station Title V permit application.			

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: **Sulfur Dioxide**		
2. Total Percent Efficiency of Control:		**N/A %**
3. Potential Emissions:	**9,115.2 lb/hour**	**39,924.6 tons/year**
4. Synthetically Limited? [ ] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: **N/A** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: **2.40 lb/MMBtu** Reference: **Allowable Emission Rate**		
7. Emissions Method Code: [X] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): **Potential emissions set equal to allowable emissions.**		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: **Rule**
2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **2.40 lb/MMBtu**
4. Equivalent Allowable Emissions: **9,115.20 lb/hour** **39,924.60 tons/year**
5. Method of Compliance (limit to 60 characters): **Continuous emissions monitoring system (CEMS)**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested allowable emissions (Field 3) is on a weekly average basis, per Specific Condition No. 4 of FDEP Operation Permit AO29-203511 and FDEP Rule 62-296.405(1)(c)2.a., F.A.C.** **Equivalent allowable emissions (Field 4) represents total *maximum* emissions for Unit No. 1 through Unit No. 6 on an hourly (weekly average) and annual average basis.**

B.

1. Basis for Allowable Emissions Code: **Rule**
2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **10.60 tons/hour**
4. Equivalent Allowable Emissions: **1,780.8 tons/week** **92,856.0 tons/year**
5. Method of Compliance (limit to 60 characters): **Continuous emissions monitoring system (CEMS)**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested allowable emissions (Field 3) represents total hourly emissions for Unit No. 1 through Unit No. 6 on a weekly average basis, per Specific Condition No. 4 of FDEP Operation Permit AO29-203511 and FDEP Rule 62-296.405(1)(c)(2.a., F.A.C.** **Equivalent allowable emissions (Field 4) represents total *maximum* emissions for Unit No. 1 through Unit No. 6 on a weekly and annual average basis.**

Allowable Emissions (Pollutant identified on front of page)

C.

1. Basis for Allowable Emissions Code: **Ambient**
2. Future Effective Date of Allowable Emissions: **N/A**
3. Requested Allowable Emissions and Units: **276.0 tons/day**
4. Equivalent Allowable Emissions: **276.0 tons/day** **N/A tons/year**
5. Method of Compliance (limit to 60 characters): **Continuous emissions monitoring system (CEMS)**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Requested allowable emissions (Fields 3 and 4) represents total *maximum* emissions for Unit No. 1 through Unit No. 6 on a daily (24-hour block) average basis. On a weekly average basis, daily SO_2 emissions will be lower consistent with the existing 1,780.8 tons/week cap for Unit No. 1 through Unit No. 6.**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters): **Visible emission information for Unit No. 6 was previously provided in the initial F.J. Gannon Station Title V permit application. This construction permit application does not request any change in visible emission limitations.**

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

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 (limit to 200 characters): **Continuous monitoring system information for Unit No. 6 was previously provided in the initial F.J. Gannon Station Title V permit application. This construction permit application does not request any change to the continuous monitoring systems.**	

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 (limit to 200 characters):	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	[ ] C	[ ] E	[X] Unknown
SO2	[ ] C	[ ] E	[X] Unknown
NO2	[ ] C	[ ] E	[X] Unknown

4. Baseline Emissions:		
PM	lb/hour	tons/year
SO2	lb/hour	tons/year
NO2		tons/year

5. PSD Comment (limit to 200 characters):

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1. Process Flow Diagram [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [ ] Not Applicable [**X**] Waiver Requested **Previously submitted with initial Title V permit application.**
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [**X**] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [**X**] Not Applicable
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [**X**] Not Applicable
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [**X**] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [**X**] Not Applicable

Additional Supplemental Requirements for Category I Applications Only N/A

10. Alternative Methods of Operation [ ] Attached, Document ID:_____ [ ] Not Applicable
11. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:_____ [ ] Not Applicable
12. Identification of Additional Applicable Requirements [ ] Attached, Document ID:_____ [ ] Not Applicable
13. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:_____ [ ] Not Applicable
14. Acid Rain Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:_____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:_____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:_____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:_____ [ ] Not Applicable

ATTACHMENT A

FRANCIS J. GANNON STATION
SULFUR DIOXIDE REGULATORY COMPLIANCE PLAN

ECT
Environmental Consulting & Technology, Inc.

PROPOSED

TAMPA ELECTRIC COMPANY

FRANCIS J. GANNON STATION

SULFUR DIOXIDE

REGULATORY COMPLIANCE PLAN

October 1998

PROPOSED

FRANCIS J. GANNON STATION

SULFUR DIOXIDE

REGULATORY COMPLIANCE PLAN

INTRODUCTION

This compliance plan was initially developed during the mid 1980's to explain how Tampa Electric Company (TEC) would demonstrate that the operation of F.J. Gannon Station would not increase current allowable sulfur dioxide (SO_2) emissions and that the Florida Ambient Air Quality Standards (AAQS) would be protected. The compliance methodology was fuel sampling and analysis.

Pursuant to the Clean Air Act Amendments of 1990, TEC installed continuous emissions monitors (CEMs) on Gannon Units 1-6. These monitors measure several process variables, including SO_2 emissions for verification of compliance with Acid Rain regulations. Based on this use of CEM's, it has become redundant for TEC to verify compliance with SO_2 AAQS via fuel analysis. Therefore, this submittal represents TEC's proposal of how compliance with the SO_2 AAQS at F.J. Gannon Station will be demonstrated through the sole use of CEMs.

COMPLIANCE WITH EMISSION LIMITS FOR PROTECTION OF FLORIDA AMBIENT AIR QUALITY STANDARDS

The current allowable SO_2 emission rate for individual coal burning units at F.J. Gannon Station is 2.4 pounds per million British Thermal Units (lb/MMBtu) on a weekly average. The current allowable SO_2 emission rate for the entire station is 10.6 tons per hour (tph) on a weekly average, (e.g., 1,780.8 tons/week). Allowable SO_2 emission rates over a 24-hour averaging time are limited by the ambient air impacts predicted with dispersion modeling.

Based on dispersion modeling conducted during the F.J. Gannon Station Title V permitting process, it was determined that the current SO_2 emission rates could contribute to modeled violations of the 24-hour AAQS.

To rectify this, TEC conducted updated dispersion modeling for F.J. Gannon Station to evaluate the potential worst case conditions that will become applicable per F.J. Gannon Station's Phase II Acid Rain Compliance plan. TEC determined that by increasing F.J. Gannon Station Units 5 and 6 stacks to 110 meters and limiting the Station to a SO_2 cap of 276 tons per day, (e.g., 11.5 tph on a 24-hour block average), the Station can demonstrate compliance with the air dispersion modeling.

As such, Tampa Electric Company is proposing the incorporation of an additional allowable SO_2 emission limitation for the entire station of 276 tons per day. TEC would still maintain compliance with the current allowable SO_2 emission rates of 2.4 lb/MMBtu on a weekly average for individual coal burning units; and 10.6 tph on a weekly average.

CONTINUOUS EMISSION MONITORING NETWORK AND ALARMS

To demonstrate TEC's compliance with emission limits that are protective of AAQS, data inputs will consist of hourly CEM data from the SO_2, Flow, and CO2 monitors for each of the six units at F.J. Gannon Station.

In the event any monitor fails for 4 hours or less, hourly data from the failed monitor(s) will be discarded and excluded from the Station's daily or weekly averages.

In the event any monitor fails for more than 4 hours up through 24 hours, TEC will incorporate Method of Determination Code (MODC) 6 pursuant to 40 CFR 75, Subpart D - The Missing Data Substitution Procedure. In general, this procedure allows for use of average hourly data from the hours before and after the outage.

In the event any monitor fails for more than 24 hours, TEC will incorporate MODC 11 pursuant to 40 CFR 75, Subpart D - The Missing Data Substitution Procedure. In general, this procedure allows for use of average hourly data from corresponding load ranges within the reporting quarter.

COMPLIANCE PLAN VERIFICATION

The CEMs at F.J. Gannon Station are subject to the quality assurance requirements of 40 CFR 70. Therefore, an examination of weekly and/or daily CEMs data will allow a straightforward evaluation of compliance with allowable SO_2 emission rates.

COMPLIANCE REPORTING

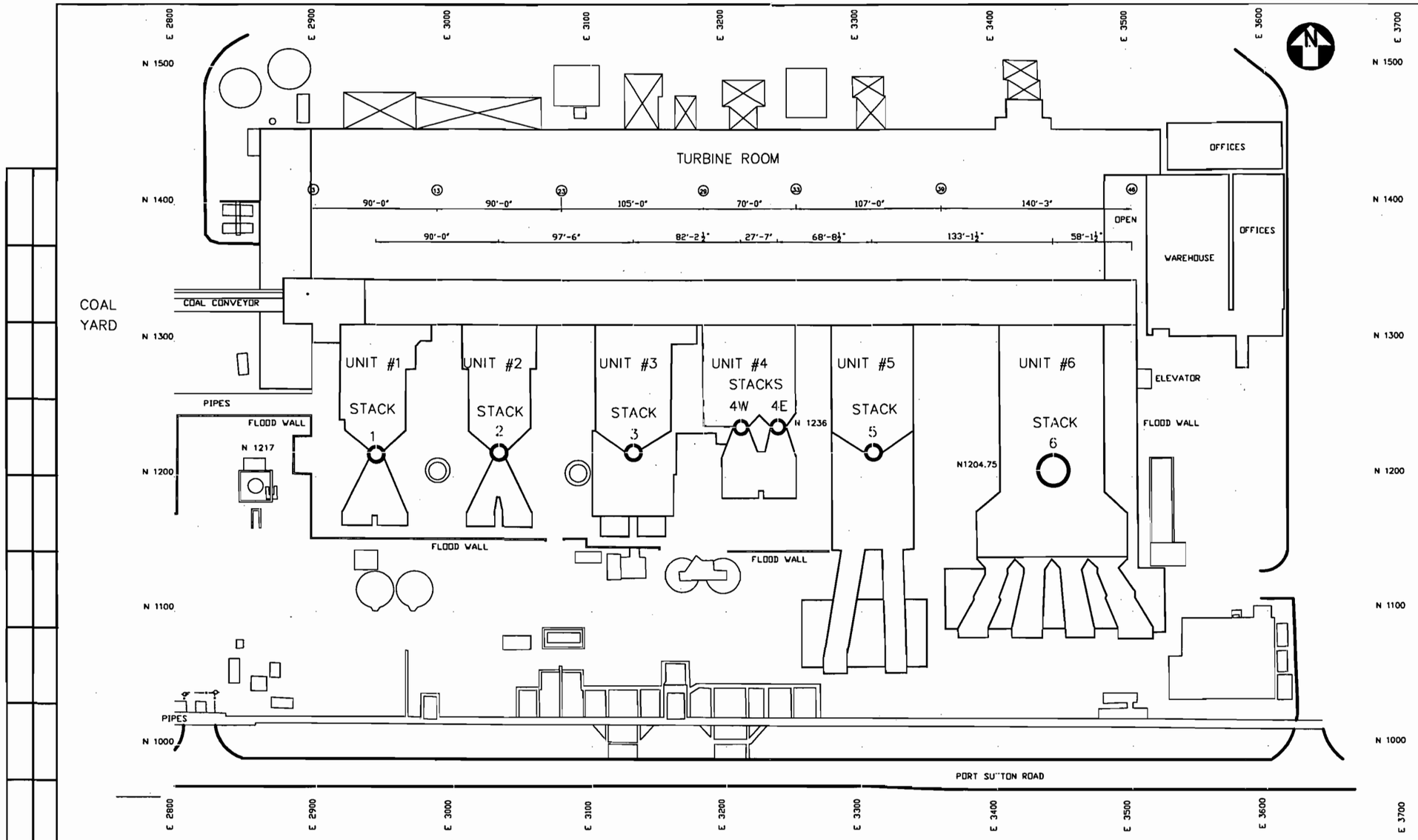
1. **Frequency** - Reporting of compliance status shall be performed on a quarterly calendar basis. Reports will be due no later than 45 days following the last day of the reporting quarter.

2. **Content** - Quarterly reports will consist of:

   - Weekly average SO_2 emissions rate per unit in lb/MMBtu;
   - Weekly average SO_2 emissions for the station in tons per hour; and
   - Daily average SO_2 emissions for the station in tons per day.

ATTACHMENT B

STACK DRAWINGS



STACK PLAN
1"=50'

ISSUE	DESCRIPTION	CHKD	CORR	APP R	DATE
4					
3					
2	PERMITTING	DA	BS	FV	10/5 98
1	CLIENT REVIEW	DA	BS	FV	9/17 98

STONE & WEBSTER ENGINEERING CORP.

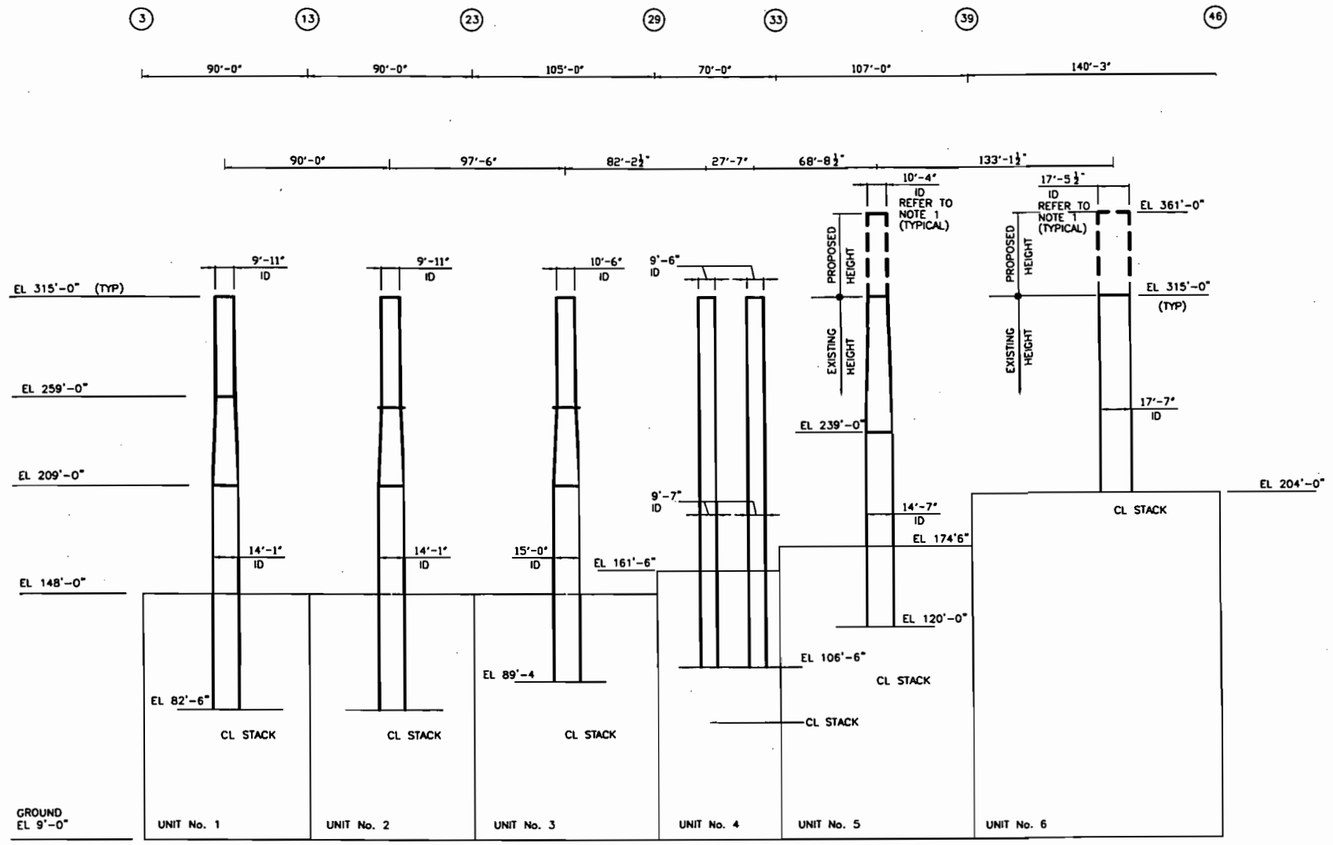
TAMPA ELECTRIC CO
GANNON STATION
UNITS 5 & 6
PROPOSED STACK EXTENSION
PLAN

DWG. NO. SWEC No. 0784402
TECO No. 359-BM-19A-2

RESP ENGR: B. SINGER SUPV: F. VINAS

ISSUE ○
PRINTS APP.CARD

DESIGNED BY B. SINGER DRAWN BY R. KELSAY DSGN CHK'D BY D. ANDREATTA CHK'D BY B. SINGER



NOTE:
1. STACK "ID'S" SHOWN ARE STACK EXIT INNER DIAMETERS.

STACK ELEVATION – LOOKING NORTH

1"=50'

4					
3					
2	PERMITTING	DA	BS	FV	10/5 98
1	CLIENT REVIEW	DA	BS	FV	9/17 98
ISSUE	DESCRIPTION	CHKD	CORR	APP R	DATE

STONE & WEBSTER ENGINEERING CORP

TAMPA ELECTRIC CO
GANNON STATION
UNITS 5 & 6
PROPOSED STACK EXTENSION ELEVATION

DWG. SWEC No. 0784402
NO. TECO No. 359-BM-19B-2

SUPV: F. VINAS
RESP ENGR: B.SINGER

ISSUE O
PRINTS
APP.CARD

DESIGNED BY B. SINGER DRAWN BY R. KELSAY DSGN CHK'D BY D. ANDREATTA CHK'D BY B. SINGER