

Department of Environmental Protection

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BUREAU OF
AIR REGULATION

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

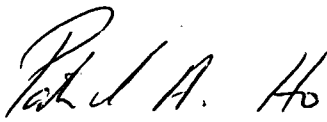
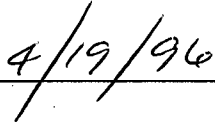
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: Tampa Electric Company	
2. Site Name: Big Bend Station	
3. Facility Identification Number: 0570039 [] Unknown	
4. Facility Location: Street Address or Other Locator: Big Bend Road City: North Ruskin County: Hillsborough Zip Code: 33572	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	4-22-96
2. Permit Number:	0570039-001-AC
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: Patrick A. Ho, P.E. Manager, Environmental Planning
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Tampa Electric Company Street Address: P.O. Box 111 City: Tampa State: FL Zip Code: 33601
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (813) 228-4844 Fax: (813) 228-4881
4. Owner/Authorized Representative or Responsible Official Statement: <i>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.</i> <p style="text-align: center;"></p> <p>_____ Signature</p> <p style="text-align: right;"> _____ Date</p>

* Attach letter of authorization if not currently on file.



TO WHOM IT MAY CONCERN:

Please be advised that Patrick A. Ho, Manager, Environmental Planning, is the authorized representative of Tampa Electric Company concerning matters with which this permit application deals.

Very truly yours,

William N. Cantrell
Vice President
Energy Supply

WNC\gm\ADMIN\AUTH.LTR

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
003	Unit No. 3, Solid Fuel Steam Generator	AC1B

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:

- 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: **AO29-279911**

- 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.

Documentation
and Notice
Req'd

Application Processing Fee

Check one:

Attached - Amount: \$ 5,000.00

Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Tampa Electric Company (TEC) was authorized by FDEP to conduct a test burn of a 80% coal/20% petroleum coke (petcoke) fuel blend for comparison to baseline coal emissions (see Attachment A for copies of the FDEP test burn letters of authorization). TEC conducted the test burn from February 17th through March 3rd, 1996.

The results from the test burn enabled TEC to conduct a screening analysis to determine whether future long-term firing of coal/petcoke fuel blends would constitute a modification subject to Prevention of Significant Detroration (PSD) review pursuant to Chapter 62-212.400, F.A.C. The analysis of PSD applicability as shown in Attachment B was conducted by comparing the fuel blend test results with the 100% coal baseline emission test data in accordance with the FDEP authorization letter dated February 21, 1996. This comparison shows that PSD review is not applicable to this permit modification request.

Based on the test burn results, TEC requests the Big Bend Station Unit No. 3 permit be modified to allow for the combustion of coal and petcoke fuel blends on a permanent-basis as an alternative method of operation to the currently approved use of 100 percent coal. Specifically, approval to combust blends of coal and petcoke containing up to 20 weight percent petcoke is requested.

During the combustion of coal/petcoke fuel blends, Unit No. 3 will exhaust to Unit No. 4 scrubber except during startups, shutdowns, and malfunctions. In the event of Unit No. 4 scrubber malfunctions, use of coal and petcoke fuel blends in Unit No. 3 will be discontinued following combustion of the fuel remaining in Unit No. 3 bunkers at the time of the malfunction.

As indicated above, an analysis of PSD applicability along with the complete test burn report are provided in Attachments B and C, respectively.

2. Projected or Actual Date of Commencement of Construction:

As soon as FDEP authorization is received.

3. Projected Date of Completion of Construction:

N/A

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 Northwest 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 [X] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

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 [] 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] _____ *4/18/96*
Signature Date

*Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact: Janice Taylor Senior Engineer, Environmental Planning
2. Application Contact Mailing Address: Organization/Firm: Tampa Electric Company Street Address: 702 N. Franklin Street City: Tampa State: FL Zip Code: 33602
3. Application Contact Telephone Numbers: Telephone: (813) 228-4939 Fax: (813) 228-4881

Application Comment

N/A

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 361.90 North (km): 3,075.00			
2. Facility Latitude/Longitude: N/A 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): N/A			

Facility Contact

1. Name and Title of Facility Contact: Greg Benton			
2. Facility Contact Mailing Address: Organization/Firm: Tampa Electric Company Street Address: Big Bend Road City: North Ruskin State: FL Zip Code: 33572			
3. Facility Contact Telephone Numbers: Telephone: (813) 228-4111 Fax: (813) 228-1864			

Facility Regulatory Classifications

1. Small Business Stationary Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
2. Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Synthetic Non-Title V Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6. Major Source of Hazardous Air Pollutants (HAPs)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. One or More Emissions Units Subject to NSPS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9. One or More Emission Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Facility Regulatory Classifications Comment (limit to 200 characters): N/A

B. FACILITY REGULATIONS

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

A complete listing of all federal and state applicable requirements will be submitted with the initial Big Bend Station Title V permit application.

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

N/A	

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
To be provided with initial Big Bend Station Title V permit application.	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant 1 of 2

1. Pollutant Emitted: SO2
2. Requested Emissions Cap: 50,000 (lb/hour) N/A (tons/year)
3. Basis for Emissions Cap Code: FDEP Rule 62-296.405(1)(c)2.b., F.A.C.
4. Facility Pollutant Comment (limit to 400 characters): Hourly emissions cap represents total sulfur dioxide emissions from Big Bend Station Unit No 1., Unit No. 2, and Unit No. 3 for a 24-hour average period. This is an existing requirement per FDEP Rule 62-296.405(1)(c)2.b., F.A.C.

Facility Pollutant Detail Information: Pollutant 2 of 2

1. Pollutant Emitted: SO2
2. Requested Emissions Cap: 63,000 (lb/hour) N/A (tons/year)
3. Basis for Emissions Cap Code: FDEP Rule 62-296.405(1)(c)2.b., F.A.C.
4. Facility Pollutant Comment (limit to 400 characters): Hourly emissions cap represents total sulfur dioxide emissions from Big Bend Station Unit No 1., Unit No. 2, and Unit No. 3 for a 3-hour average period. This is an existing requirement per FDEP Rule 62-296.405(1)(c)2.b., F.A.C.

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: II.D.1. <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested Attachment D
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: II.D.2. <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested Attachment D
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Additional Supplemental Requirements for Category I Applications Only N/A

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

<p>11. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached, Document ID: _____</p> <p><input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>

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:

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:

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. 3; Solid Fuel Steam Generator		
2. Emissions Unit Identification Number: [] No Corresponding ID [] Unknown 003		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? <input checked="" type="checkbox"/> 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: 010

Emissions Unit Information Section 1 of 1

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:	445 MW	
5. Incinerator Information: N/A		
Dwell Temperature:	°F	
Dwell Time:	seconds	
Incinerator Afterburner Temperature:	°F	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	4,115 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):	
<p>Maximum fuel heat input rate of 4,115 mmBtu/hr is on a monthly average basis.</p>	

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.)

A complete listing of all federal and state applicable requirements for Unit No. 3 will be submitted with the initial Big Bend Station Title V permit application.

Emissions Unit Information Section 1 of 1

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

N/A	

**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-003	
2. Emission Point Type Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): N/A	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: When Unit No. 3 is combusting up to 20% petcoke with coal fuel blends, the combined exhaust from Unit No. 3 and Unit No. 4 is exhausted through stacks CS-003 and CS-004 when in flue gas integration mode except during startups, shutdowns, and malfunctions.	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	499 feet
7. Exit Diameter:	24.0 feet
8. Exit Temperature:	308 °F

Emissions Unit Information Section 1 of 1

9. Actual Volumetric Flow Rate:	1,296,547 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: 17 East (km): 361.9 North (km): 3,075.0	
14. Emission Point Comment (limit to 200 characters): Information provided for stack CS-003 based on 8/4/94 unscrubbed test data.	

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Coal and coal/petcoke fuel blends in Unit No. 3.	
2. Source Classification Code (SCC): 1-01-002-01	
3. SCC Units: tons burned (all solid fuels)	
4. Maximum Hourly Rate: 190.3	5. Maximum Annual Rate: 1,667,383
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 4.8	8. Maximum Percent Ash: 10.7
9. Million Btu per SCC Unit: 24	
10. Segment Comment (limit to 200 characters): No. 2 fuel oil used for ignition during startups. Fuel sulfur, ash, and heat contents based on 80/20 percent coal/petcoke blend.	

**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
SO2			EL
NOX			EL
PM	010		EL
PM10	010		NS
CO			NS
VOC			NS
PB	010		NS
H106 HCL			NS
H107 HF			NS
H113 Manganese			NS
H133 Nickel			NS
H162 Selenium			NS

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

Pollutant Detail Information:

1. Pollutant Emitted: SO2	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	26,747.5 lb/hour 117,154.1 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
6. Emission Factor: N/A Reference:	
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters): Potential hourly and annual emission rates set equal to equivalent allowable emission rates.	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): N/A	

Emissions Unit Information Section 1 of 1

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: 6.5 lb/mmBtu
4. Equivalent Allowable Emissions: 26,747.5 lb/hour 117,254.1 tons/year
5. Method of Compliance (limit to 60 characters): Annual testing using EPA Reference Methods and fuel analysis using ASTM methods.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Hourly rate is a two-hour average pursuant to FDEP Rule 62-296.405(1)(c)2.b., F.A.C.

B.

1. Basis for Allowable Emissions Code: RULE
2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 25.0 tons per hour
4. Equivalent Allowable Emissions: 50,000 lb/hour N/A tons/year
5. Method of Compliance (limit to 60 characters): Daily composite fuel sampling and analysis using ASTM methods per Specific Condition 12.C. of FDEP permit AO29-179911.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Hourly rate represents total emissions from Units 1, 2, and 3 for a 24-hour average period per FDEP Rule 62-296.405(1)(c)2.b., F.A.C.

Emissions Unit Information Section 1 of 1

Allowable Emissions (Pollutant identified on front of page)

C.

1. Basis for Allowable Emissions Code: RULE
2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 31.5 tons per hour
4. Equivalent Allowable Emissions: 63,000 lb/hour N/A tons/year
5. Method of Compliance (limit to 60 characters): Daily composite fuel sampling and analysis using ASTM methods per Specific Condition 12.C. of FDEP permit AO29-179911.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Hourly rate represents total emissions from Units 1, 2, and 3 for a 3-hour average period per FDEP Rule 62-296.405(1)(c)2.b., F.A.C. .

D.

1. Basis for Allowable Emissions Code: ESCPSD
2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 0.82 lb/mmBtu
4. Equivalent Allowable Emissions: 3,374.3 lb/hour 14,779.4 tons/year
5. Method of Compliance (limit to 60 characters): Continuous emission monitoring system (CEMS).
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Emission limit is applicable to the flue gas integration mode when Unit 3 is combusting up to 20% petcoke and coal fuel blends except during startups, shutdowns, and malfunctions.

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

Pollutant Detail Information:

1. Pollutant Emitted: NOX	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	2,880.5 lb/hour 12,616.6 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
6. Emission Factor: N/A Reference:	
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters): <p>Potential hourly and annual emission rates set equal to equivalent allowable emission rates.</p>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

Emissions Unit Information Section 1 of 1

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: 0.7 lb/mmBtu
4. Equivalent Allowable Emissions: 2,880.5 lb/hour 12,616.6 tons/year
5. Method of Compliance (limit to 60 characters): 30-Day rolling average to be determined using CEMS.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Hourly rate is a 30-day rolling average pursuant to FDEP Rule 62-296.405(1)(d)4., F.A.C.

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

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

Pollutant Detail Information:

1. Pollutant Emitted: PM/PM10
2. Total Percent Efficiency of Control: 99.7 %
3. Potential Emissions: 1,234.5 lb/hour 2,253.0 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year
6. Emission Factor: N/A Reference:
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
8. Calculation of Emissions (limit to 600 characters): Potential hourly and annual emission rates set equal to equivalent allowable emission rates.
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

Emissions Unit Information Section 1 of 1

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: 0.3 lb/mmBtu
4. Equivalent Allowable Emissions: 1,234.5 lb/hour 2,253.0 tons/year
5. Method of Compliance (limit to 60 characters): Annual testing using EPA Reference Methods. As an option, three soot-blowing test runs will be used to demonstrate compliance with the non-soot blowing standard.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): 0.3 lb/mmBtu applicable during soot-blowing (3-hours per day). 0.1 lb/mmBtu applicable during non-soot blowing. Per FDEP Rules 62-210.700(3) and 62-296.405(1)(b), F.A.C. Hourly equivalent allowable emissions based on 0.3 lb/mmBtu. Annual equivalent allowable emissions based on 3 hrs/dy at 0.3 lb/mmBtu and 21 hrs/dy at 0.1 lb/mmBtu.

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)**

Visible Emissions Limitation: Visible Emissions Limitation 1 of 3

1. Visible Emissions Subtype: VE20			
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule	<input type="checkbox"/> Other	
3. Requested Allowable Opacity:	Normal Conditions: 20 %	Exceptional Conditions: 27 %	
	Maximum Period of Excess Opacity Allowed: 6 min/hour		
4. Method of Compliance: Annual test using EPA Reference Method 9.			
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-296.405(1)(a), F.A.C.			

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

1. Visible Emissions Subtype: VE60			
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule	<input type="checkbox"/> Other	
3. Requested Allowable Opacity:	Normal Conditions: %	Exceptional Conditions: 60 %	
	Maximum Period of Excess Opacity Allowed: 24 min/hour		
4. Method of Compliance: Annual test using EPA Reference Method 9.			
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-210.700(3), F.A.C.			

**I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)**

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

1. Visible Emissions Subtype: VE60			
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule	<input type="checkbox"/> Other	
3. Requested Allowable Opacity:	Normal Conditions: %	Exceptional Conditions: 60 %	
	Maximum Period of Excess Opacity Allowed: 60 min/hour		
4. Method of Compliance: Annual test using EPA Reference Method 9.			
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-2210.700(3), F.A.C.			

Visible Emissions Limitation: Visible Emissions Limitation N/A

1. Visible Emissions Subtype:			
2. Basis for Allowable Opacity:	<input type="checkbox"/> Rule	<input type="checkbox"/> 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 1 of 5

1. Parameter Code: VE	2. Pollutant(s): N/A
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Thermo Environmental Corporation Model Number: M500 Serial Number: 3294/3296	
5. Installation Date: 2/15/76	
6. Performance Specification Test Date: 8/22/93	
7. Continuous Monitor Comment (limit to 200 characters): Required by FDEP Rule 62-296.405(1)(f)1.a., F.A.C. System includes two opacity monitors.	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Thermo Environmental Corporation Model Number: 43B Serial Number: 43B-48736-281	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): Required by FDEP Rule 62-296.405(1)(f)1.a., F.A.C. System includes four SO₂ monitors.	

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Thermo Environmental Corporation Model Number: 42D Serial Number: 42D-48329-280	
5. Installation Date: 5/15/95	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 System includes two NO_x monitors.	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: FLOW	2. Pollutant(s): N/A
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: USI Model Number: Ultraflow 100 Serial Number: P-08437U-0293	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 System includes four flow monitors.	

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: CO2	2. Pollutant(s): N/A
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Siemens Model Number: Ultramat 5E Serial Number: EN-027	
5. Installation Date: 5/15/95	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR Part 75 System includes four CO₂ monitors.	

Continuous Monitoring System: Continuous Monitor ____ of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> 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.
-] 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.

Emissions Unit Information Section 1 of 1

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.
-] 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	<input type="checkbox"/>] C	<input type="checkbox"/>] E	<input type="checkbox"/>] Unknown
SO2	<input type="checkbox"/>] C	<input type="checkbox"/>] E	<input type="checkbox"/>] Unknown
NO2	<input type="checkbox"/>] C	<input type="checkbox"/>] E	<input type="checkbox"/>] Unknown
4. Baseline Emissions:			
PM	lb/hour	tons/year	
SO2	lb/hour	tons/year	
NO2		tons/year	
5. PSD Comment (limit to 200 characters):			
<p>Emission unit is part of baseline PSD emission inventory. Use of coal/petcoke fuel blends will result in a net decrease in emissions in comparison to 100% baseline coal.</p>			

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

Supplemental Requirements for All Applications

<p>1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: II.D.3 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested Attachment E</p>
<p>2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>5. Compliance Test Report <input type="checkbox"/> Attached, Document ID _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

Emissions Unit Information Section 1 of 1

Additional Supplemental Requirements for Category I Applications Only N/A

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

ATTACHMENT A

FDEP TEST BURN AUTHORIZATION LETTERS



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

January 11, 1996

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Janice K. Taylor
Senior Engineer
Environmental Planning
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

Dear Ms. Taylor:

Re: Request to Allow Special Testing - Petroleum Coke Test Burn/
Big Bend Unit 3

The Department proposes to allow Tampa Electric Company (TEC) to conduct special testing of a 80%/20% blend of coal/petroleum coke as outlined in TEC's letter dated December 8, 1995. This action does not constitute an amendment of the current operating permit (A029-179911) nor does it grant approval to burn petroleum coke beyond the test period which is not to exceed three weeks. As indicated previously, we remain concerned about the issues outlined in our October 27, 1995 letter.

Before conducting the tests, you must publish the enclosed Notice of Intent to Allow Special Testing in a local newspaper of general circulation in order to notify the public of this temporary change in operation. Please submit any comments you may wish to have considered concerning the Department's proposed action to Mr. A. A. Linero, P.E., at the above address.

Sincerely,

A handwritten signature in cursive script, appearing to read "C. H. Fancy".

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/jr/t
Enclosure

cc: W. Thomas, SWD
E. Deken, EPCHC

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF INTENT TO ALLOW SPECIAL TESTING

The Department of Environmental Protection (Department) gives notice of its intent to authorize special testing for Tampa Electric Company, Inc., P.O. Box 111, Tampa, Florida 33601-0111. This company operates a coal-fired power generation facility located on Big Bend Road, near Ruskin, in Hillsborough County, Florida. The authorization allows the temporary firing of a 80% coal/20% petroleum coke blend (by weight) in Big Bend Unit 3 scheduled for February/March 1996. Exhaust gases from Unit 3 will be scrubbed by the Unit 4 flue gas desulfurization system for the duration of the test. This temporary change in operation will not exceed three weeks in duration and is not expected to cause or contribute to a violation of any air pollution standard or adversely affect the environment.

A person whose substantial interests are affected by the Department's proposed action may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays at the following locations:

Department of Environmental Protection
111 - South Magnolia Drive
Tallahassee, Florida 32301

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218

Environmental Protection Commission of
Hillsborough County
1410 North 21st Street
Tampa, Florida 33605

Any person may send written comments on the proposed action to Administrator, New Source Review Section, at the Department's Tallahassee address. All comments received within 14 days of the publication of this notice will be considered.



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

February 21, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

RECEIVED

FEB 26 1996

ENVIRONMENTAL
PLANNING

Ms. Janice K. Taylor
Senior Engineer
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Dear Ms. Taylor:

Re: Letter of Authorization to Allow Special Testing - Petroleum Coke Test Burn Big Bend Unit 3. Permit No. AO29-179911

The Department has reviewed the request from Tampa Electric Company (TEC) dated October 6, 1995 and supplementary information dated December 8, 1995 to conduct performance tests while firing petroleum coke/coal blends at Big Bend Power Plant, Unit No. 3.

You are hereby authorized to conduct performance tests for pollutant emissions on Big Bend Unit No. 3 in Tampa, Hillsborough County, while firing blends of petroleum coke (petcoke) and coal. All conditions of your operating permit No. AO29-179911 related to air pollution emission limits and control equipment remain in force.

The performance tests will be conducted in order to gather data regarding pollutant emissions and operational limitations while firing blends of petcoke and coal containing a maximum of 20 percent (% by weight) petcoke. Screening to determine whether future long-term firing of petcoke/coal blends constitutes a modification subject to a review for Prevention of Significant Deterioration (PSD) shall be performed in accordance with Chapter 403, F.S.; Chapters 62-210 through 62-297 and 62-4, F.A.C.; and Title 40, Code of Federal Regulations (CFR; July 1, 1994 version). The procedure will consist of a comparison of estimates of "representative actual annual emissions" while burning petcoke/coal blends against past actual emissions while burning coal (or estimates of past actual emissions developed from 100 percent coal baseline performance tests).

The performance test results along with any modification application to allow permanent petcoke/coal burning will be reviewed by the Department's Bureau of Air Regulation (BAR) and interested agencies/parties (i.e., DEP Southwest District Office, Hillsborough County Environmental Protection Commission (EPC), US EPA, National Park Service, etc.).

The performance tests shall be subject to the following conditions:

1. The permittee shall notify, in writing, the DEP and EPC at least 15 days prior to commencement of the baseline and trial petroleum coke and coal blend performance tests so that the department has the opportunity to conduct a Type I or II stack audit. Two copies of the written report shall be submitted to this office within 45 days upon completion of the last test run.
2. The trial petroleum coke and coal blend performance tests shall be conducted for not more than 21 days. All testing shall be concluded within 60 days of when petroleum coke is first introduced into TEC's Big Bend Unit No. 3. A satisfactory emissions test will consist of a minimum of six test runs per pollutant.
3. As-burned daily fuel samples shall be collected and analyzed for sulfur, nitrogen, and metals content throughout the petroleum coke and the baseline coal test periods. Weekly composites from daily sampling shall be required; in addition and during the particulate matter test runs, a minimum of three (3) separate samples shall be taken and analyzed.
4. As-fired ash percent and ash mineral analysis for concentrations of arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver and beryllium in the petroleum coke and coal blend shall be determined upon commencement and at completion of the trial burn and be compared to the concentration of the same metals in the coal used during the baseline tests.
5. Petroleum coke shall be blended with coal during the trial performance tests in the following concentration: trial petroleum coke and coal test blends limited to a maximum of 20% by weight petroleum coke. The sulfur content of the blend shall not exceed the permitted value (see AO29-179911).
6. The total weight of the petroleum coke burned during the performance tests shall not exceed the permitted rate for fuel usage.
7. Sulfur dioxide, nitrogen oxides (NO_x), and opacity emissions data shall be recorded using continuous emissions monitors (CEMS) during the baseline and trial burn performance tests. If the plant CEMS are used for these tests, these systems shall be quality assured pursuant to 40 CFR 60, Appendix F requirements. The data assessment report from 40 CFR 60, Appendix F requirements. The data assessment report form 40 CFR 60, Appendix F, for the most recent relative accuracy test audit (RATA) and the most recent cylinder gas audit (CGA), shall be submitted with the trial burn test report. In addition, stack tests shall be conducted for the pollutants: particulate matter (PM; assume that all of PM is PM₁₀), carbon monoxide, and sulfuric acid mist.
8. For modification purposes, the pollutant emissions results from the trial petroleum coke and coal blend performance tests shall be compared to the baseline tests conducted when firing coal only. The sulfur dioxide emission results from the trial petroleum coke and coal blend performance tests shall be compared to baseline tests conducted when firing coal only. The sulfur content of the coal used during the baseline tests shall be determined daily on an as-fired basis.

9. Performance tests shall be conducted using EPA Methods, as contained in 40 CFR 60 (Standards of Performance for New Stationary Sources), or 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department in accordance with F.A.C. 62-297.620. Any change to the test methods must receive prior approval of the Department.
10. If additional time is needed, the permittee shall request an extension of time and provide the Department with documentation of the progress accomplished to date and shall identify what is left to be done to complete the performance tests.
11. Daily accounting of boiler operations while firing coal only and a blend of petroleum coke and coal shall be required. Records shall include, but not be limited to, heat input, steam production, pressure, temperature, power, fuel input rates, fuel to air ratios, etc. Also, daily record keeping of the control equipment parameters shall be required and any alteration of the control equipment operational parameters between the baseline and trial burn test shall be documented and summarized in the final report. Any change in fuel pretreatment (i.e. flux addition), or in the type or degree of pre-precipitator flue gas conditioning shall be considered as part of this accounting.
12. Complete documentation (recording) of any firing of the petroleum coke and coal blend shall be required (i.e. all CEMs records, testing results, materials utilized, by weight, etc.) and kept on file for a minimum of two years.
13. The authorized trial petroleum coke and coal blend performance test shall not result in the release of objectionable odors pursuant to F.A.C. Rule 62-296.320(2).
14. Performance testing shall immediately cease if Big Bend Unit 3 operations are not in accordance with the conditions in the applicable permit (see DEP Permit No. AO29-179911). Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
15. The performance tests for pollutant emissions shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida. The professional engineer shall sign and seal each copy of the stack report.
16. This Department action is only to authorize the performance of a single trial petroleum coke and coal blend boiler performance/emission test. Any firing of petroleum coke after the last performance test run is completed will be deemed a violation of the DEP Permit No. AO29-179911.
17. The Department and EPC shall be notified in writing on the date of the last test run completion.
18. The performance tests series shall include individual tests for the blend and a baseline test conducted with the source operating at capacity. Capacity is defined as 90-100 percent of the permitted capacity. If it is impracticable to test at this capacity, the source may be tested at less than capacity; in this case subsequent source operation with a petroleum coke and

Ms. Janice K. Taylor
Tampa Electric Company
Page 4 of 4

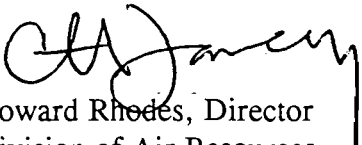
coal blend, if requested and approved by the Department, is limited to 110 percent of the test load until a new test is conducted.

19. Attachments (see Attachment Section) to be incorporated:

TEC's October 6, 1995 letter to Mr. Clair Fancy
DEP October 27, 1995 letter to Ms. Janice K. Taylor
TEC's December 8, 1995 letter to Mr. A. A. Linero

The Department is issuing this authorization based on reasonable assurances which indicate the proposed project will comply with the appropriate provisions of Florida Statutes (F.S.) Chapter 403 and Florida Administrative Code (F.A.C.) Chapters 62-210 through 62-297 and 62-4.

Sincerely,


for Howard Rhodes, Director
Division of Air Resources
Management

HLR/al/w

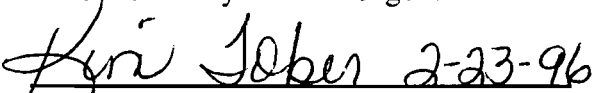
CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this PERMIT AMENDMENT and all copies were mailed by certified mail before the close of business on 2-23-96 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk Date

Copies to be furnished to:

Jerry Campbell, EPC
Bill Thomas, SWD

ATTACHMENT B
ANALYSIS OF PSD APPLICABILITY

Attachment B. Baseline and Petroleum Coke Test Burn Results Comparison

BASELINE COAL TEST BURN DATA					
Pollutant	Emission Rate (lb/mmBtu)	Load (mmBtu/hr)	Emission Rate (lb/hr)	Annual Utilization ¹ (hr/yr)	Annual Emission (tpy)
SO ₂	4.288	3,540	15,179.52	7,981	60,573.9
NO _x	0.652	3,540	2,308.08	7,981	9,210.4
PM	0.047	3,540	166.38	7,981	663.9
CO	0.109	3,540	385.86	7,981	1,539.8
H ₂ SO ₄	0.0206	3,540	72.92	7,981	291.0

PETROLEUM COKE TEST BURN DATA					
Pollutant	Emission Rate (lb/mmBtu)	Load (mmBtu/hr)	Emission Rate (lb/hr)	Annual Utilization ¹ (hr/yr)	Annual Emission (tpy)
SO ₂	0.169	3,574	604.01	7,981	2,410.3
NO _x	0.640	3,574	2,287.36	7,981	9,127.7
PM	0.009	3,574	32.17	7,981	128.4
CO	0.104	3,574	371.70	7,981	1,483.3
H ₂ SO ₄	0.0177	3,574	63.26	7,981	252.4

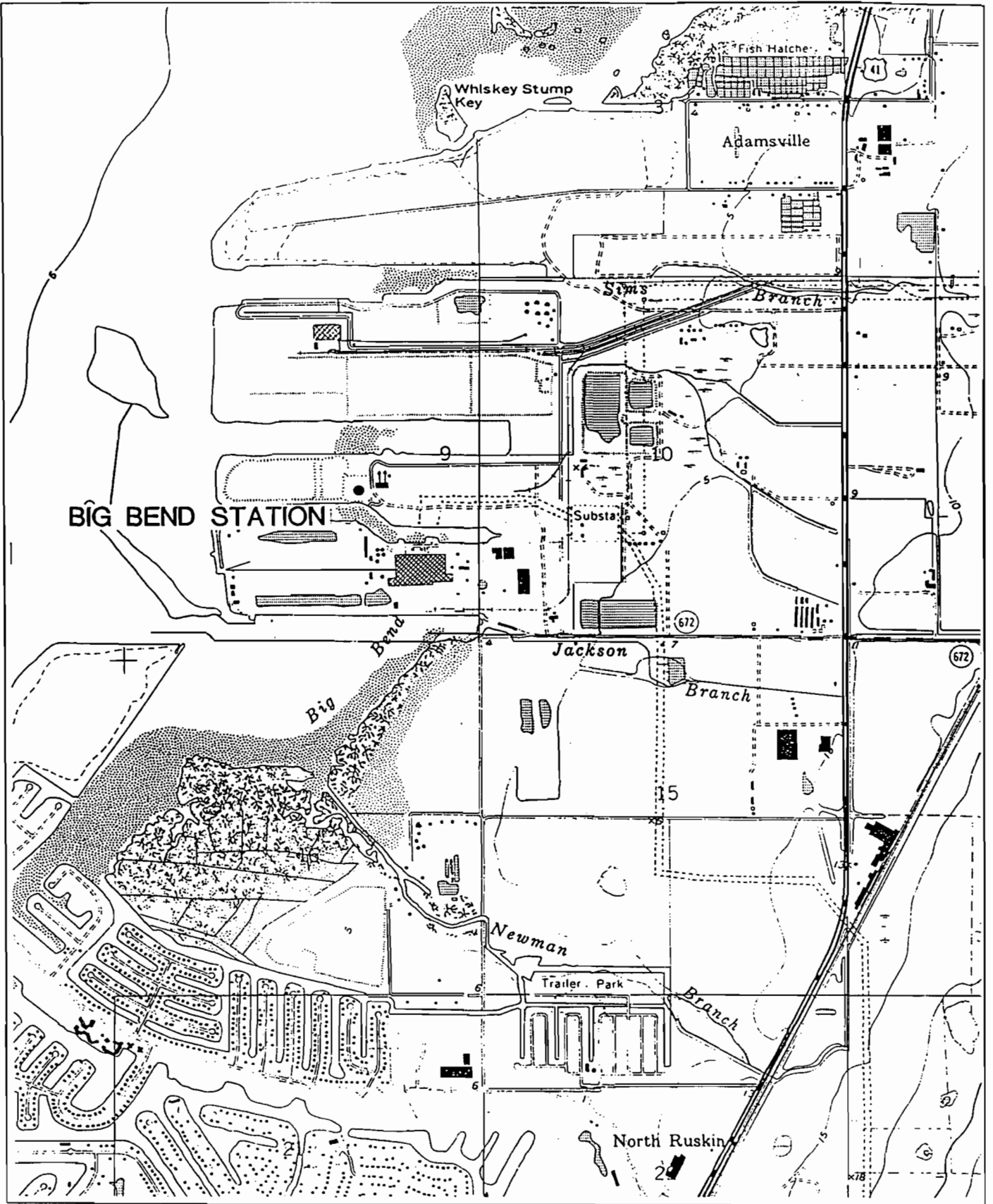
EMISSION RATE CHANGE (PETROLEUM COKE TEST BURN - BASELINE TEST BURN)					
Pollutant		Emission Rate (lb/hr)	Annual Utilization ¹ (hr/yr)	Annual Emission (tpy)	
SO ₂		-14,575.51	7,981	-58,163.59	
NO _x		-20.72	7,981	-82.68	
PM		-134.21	7,981	-535.58	
CO		-14.16	7,981	-56.52	
H ₂ SO ₄		-9.66	7,981	-38.56	

¹ From 1994 Annual Operating Report (AOR).

ATTACHMENT C

PETROLEUM COKE TEST BURN REPORT

ATTACHMENT D
FACILITY SUPPLEMENTAL INFORMATION



DOCUMENT II.D.1.
BIG BEND STATION AREA MAP

Source: USGS Quad, Gibsonton, FL, 1987

ECT
Environmental Consulting & Technology, Inc.

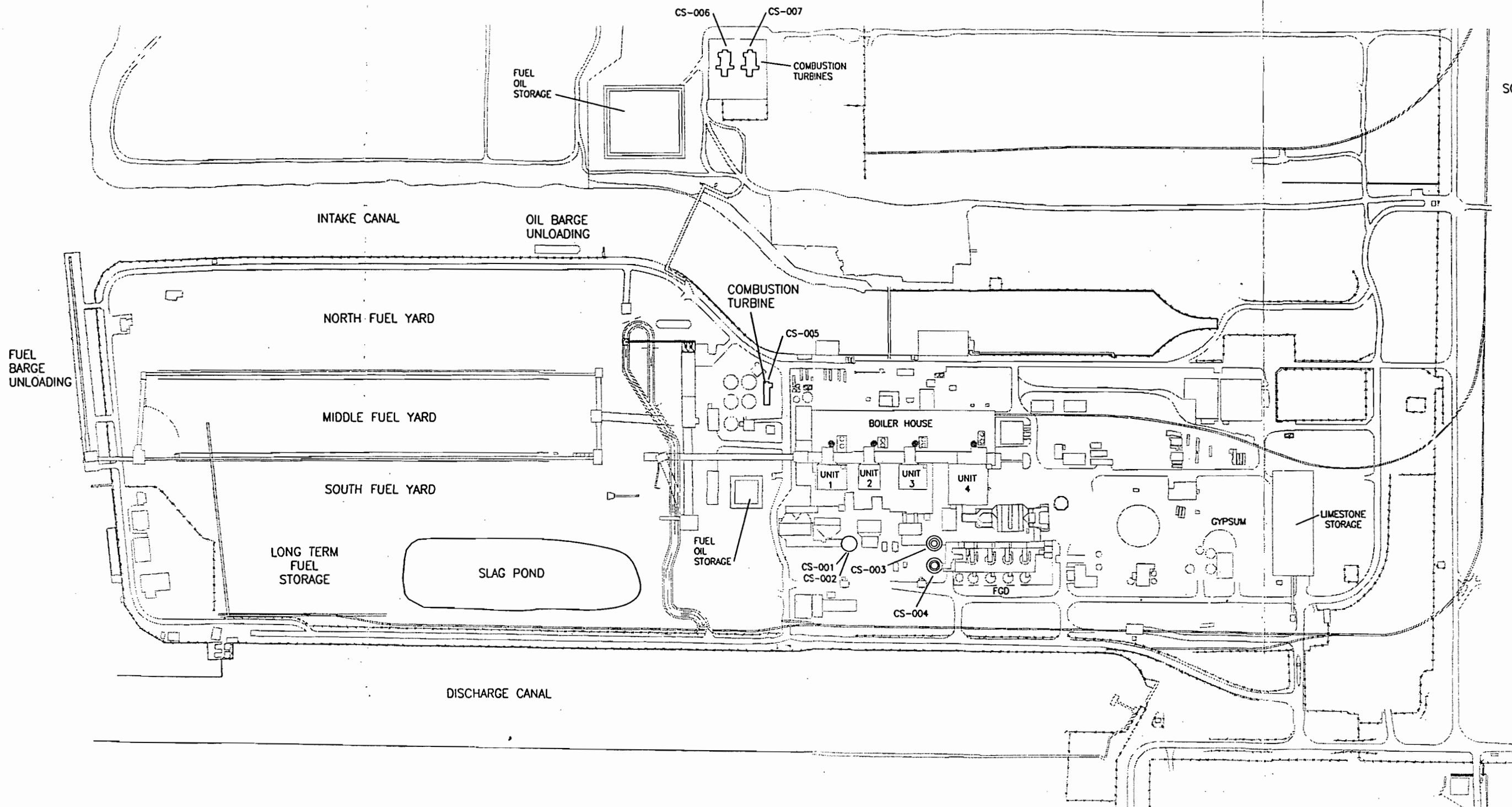


NO SCALE

SCALE: 1"=400' (APPROX.)

LEGEND

U-003 EMISSION POINT



DOCUMENT II.D.2

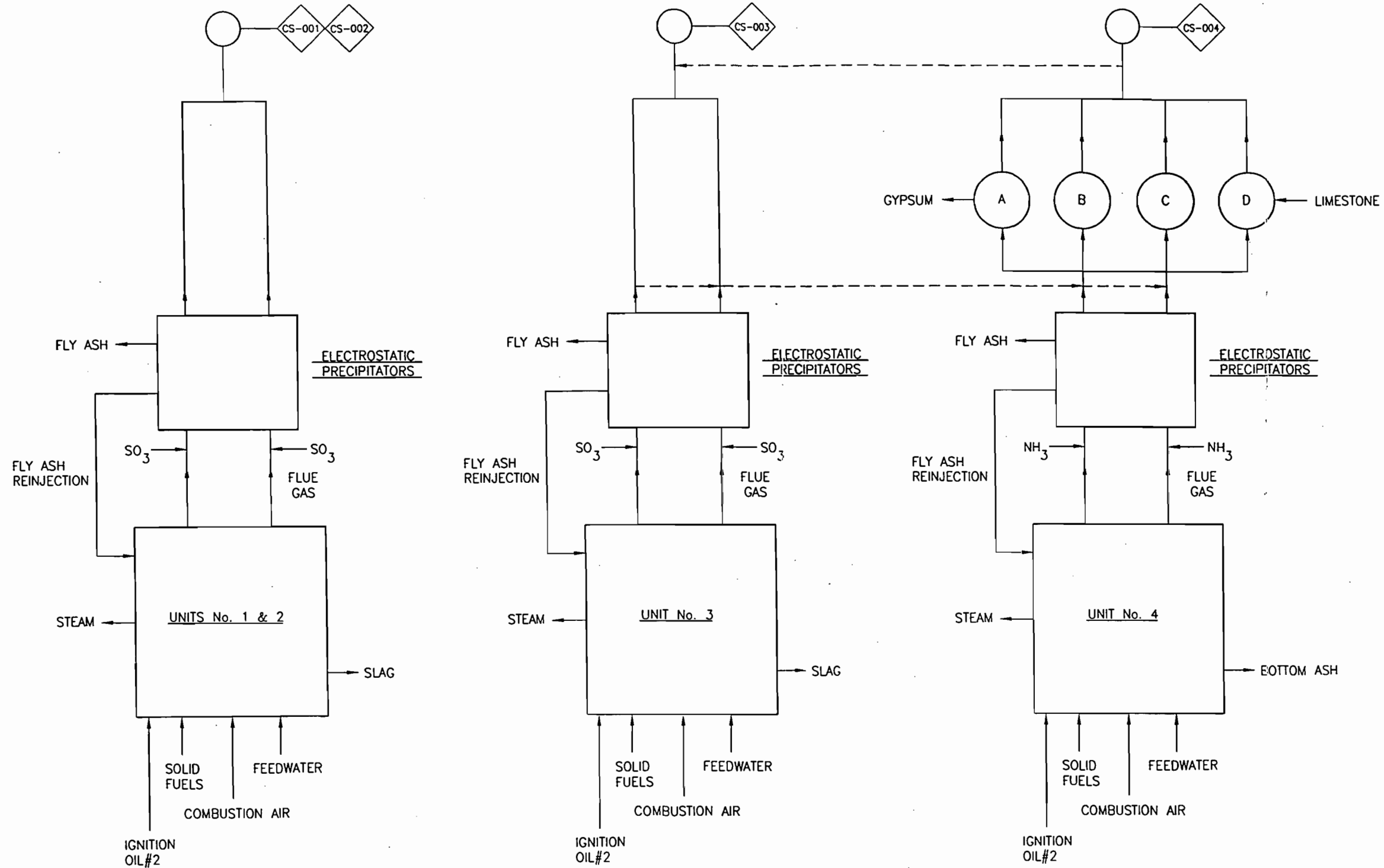
COMBUSTION EMISSION SOURCES

Source: ECT, 1994.





ATTACHMENT E

EMISSION UNIT SUPPLEMENTAL INFORMATION



FLUE GAS
DESULFURIZATION
MODULES

LEGEND

-  EMISSION POINT
-  UNIT 3 FLUE GAS INTEGRATION

DOCUMENT II.D.3
 BOILER PROCESS FLOW DIAGRAM
 Source: ECT, 1994.

